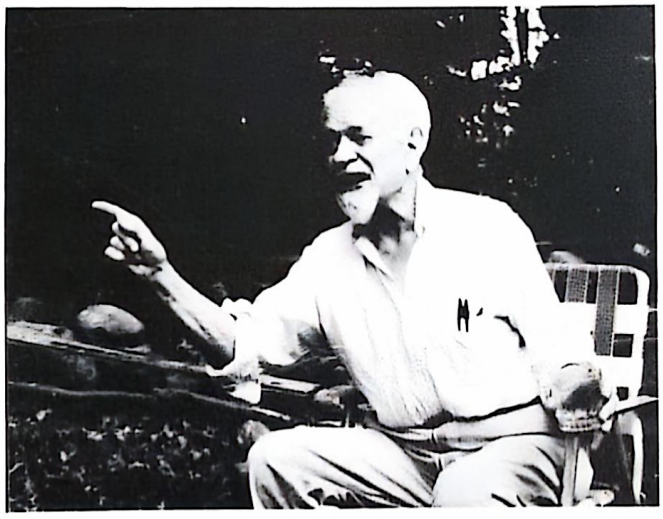
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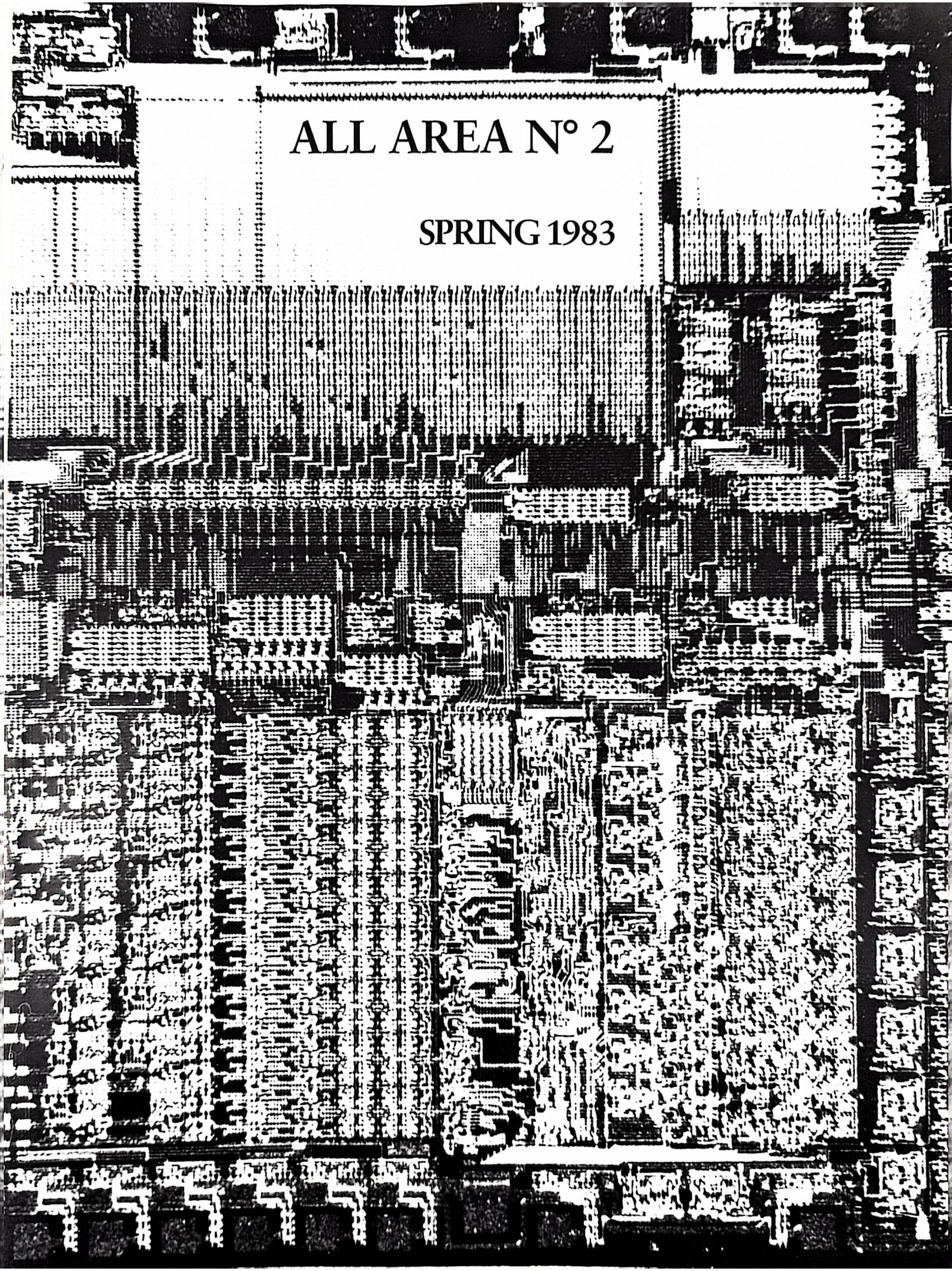
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INTERVIEWS — KENNETH BURKE & JULIA KRISTEVA
NOTES FOR *MAXIMUS POEMS IV, V, VI* — CHARLES OLSON
A CRITIQUE OF THE DOMINATION OF NATURE — TRENT SCHROYER
TELECONFERENCING, COMPUTERS, AND ART — FRANK GILLETTE







ALL AREA N° 2

SPRING 1983

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South and De Peyster Streets, November 26, 1935. Photograph by Berenice Abbott. Federal Art Project "Changing New York". Museum of the City of New York.

CONTENTS

Counter-Gridlock	*Kenneth Burke*	4
On Horror and Abjection	*Julia Kristeva*	36
Notes for *Maximus Poems IV, V, VI*	*Charles Olson*	46
A Letter on Olson and Burke	*Sherman Paul*	64
Teleconferencing, Computers, and Art	*Frank Gillette* *Brendan O'Regan*	66
John von Neumann and Norbert Weiner/Heims	*David Finkelstein*	98
A Critique of the Domination of Nature	*Trent Schroyer*	102
The Implosion of Meaning in the Media	*Jean Baudrillard*	118
The Geopolitics of Information/Smith	*B.P. Menon*	122
Joseph Dreaming, The Stone Corral	*Aaron Fogel*	128
The Meaning of the Chimera	*Harley C. Shands*	132
The Language Orphan, They, The Arcade's Discourse on Method	*Clayton Eshelman*	140
from *Body Bee Calling*	*Miguel Algarin*	144
Bioregion and Human Location	*Peter Berg*	146
Beyond Geography/Turner	*Paul Metcalf*	152
from *Manu Stuprare*	*William Margolis*	160
Americans and Others	*Alan Sondheim*	164
from *Spar*	*Jim Krell*	172

COVER
Front: Machine Shop at Bethlehem Steel Company (courtesy of Brown Brothers). Kenneth Burke at Andover, New Jersey, 1981 (photographs by Bethany Jacobson). *Back*: Miss Radio 1950 holding world's largest vacuum tube (Bell Labs). [Design: R.S.]

COUNTER-GRIDLOCK

AN INTERVIEW WITH KENNETH BURKE



Jack of all trades editor at *The Dial.*

> For a Rotinese, the pleasure of life is talk—not simply an idle chatter that passes time, but the more formal taking of sides in endless dispute, argument, and repartee or the rivaling of one another in eloquent and balanced phrases on ceremonial occasions. Speeches, sermons, and rhetorical statements are a delight. But in this class society, with hierarchies of order, there are notable constraints on speech. In gatherings, nobles speak more than commoners, men more than women, elders more than juniors; yet commoners, women, and youth, when given the opportunity as they invariably are, display the same prodigious verbal prowess. Lack of talk is an indication of distress. Rotinese repeatedly explain that if their 'hearts' are confused or dejected, they keep silent. Contrarily, to be involved with someone requires active verbal encounter and this often leads to a form of litigation that is conducted more, it would seem, for the sake of argument than for any possible gain.[1]

This interview is the result of several visits with Kenneth Burke during 1980-81 at his home outside Andover, New Jersey where he has lived since 1921. Burke is now 84 years old and, as he emphasized in a recent letter, "hurrying like crazy to get things cleared up." Frank Gillette and I made each visit; twice we were accompanied by Monte Davis, co-author of a book on Rene Thom's catastrophe theory,[2] and once by Pellegrino D'Acierno, a Vico and Gramsci scholar who teaches at Columbia University.

We were introduced to Kenneth Burke by my friend Stevie Chinitz who has remained close to him since he was her teacher at Bennington. We drove out from Manhattan through a landscape Burke has described in writing on his friend William Carlos Williams: "that hateful traffic-belching squandering of industrial power atop the tidal swamps." Then past Paterson and much further out along Route 80, we turned north toward Andover, through an area just beginning to show the signs of "a cancerous growth of haphazard real-estating"[3] and drove up to Burke's farmhouse, still relatively isolated on Amity Road. There, suddenly, from around the back to greet us was Kenneth Burke: active, demonstrative and welcoming.

Burke selected portions of a transcript I prepared, revised his answers ("you can tell them I struck all the goddams. They're such a goddam bore!") and added several notes which are indicated by brackets. We covered a lot of ground: "with several other spots it's stuff I've discussed elsewhere, and with the rest it's stuff I'm involved in elsewhere *now*."[4]

The interview begins with a turn toward biography, motivated by our being together one time on the last day of 1980. It ends with Burke's written summary of a problem that had long concerned him, with the date of his solution. Otherwise dates are not indicated, and the interview reads as one sequence. Describing the nature of these occasions, by reference to the auto-biographical hero of one of his stories, Burke summarizes:

> This can turn out to be a fairly mellow text, in keeping with Herone Liddel's humanistic ideal of being "as mellow as an over-ripe canteloupe." (The nearest I can come to that is when guys like youenz turn up in not too cold weather, and we can haggle backandforth in the room where *real* logs are burning in the fire place.)

In a 1967 addendum to *Counter-Statement,* Burke alluded to the "inchoate possibility of an avowal involving literal memories, deliberate fictions, and diaristic accidents." I asked him about his, and he said such a work would necessitate facing "the return of the repressed," and he continued to concentrate on the present. But now he was having difficulty

finishing two epilogues for new editions of his other two books written in the thirties: *Permanence and Change* and *Attitudes toward History*. Throughout the time we visited, he read us excerpts of these essays which were going off in unanticipated directions.

By strategically coining a word to encompass *this* situation, Burke demonstrated for us one practical use of his method "perspective by incongruity" ("the gauging of situations by verbal 'atom-cracking' ") and provided a title for the interview:

> Remember the big traffic jam in New York when the subways stopped? That's when I learned the word *gridlock*. Gridlock means you can't go any way. The traffic is so jammed, it can't go forward, backwards, or sideways. What I had was *counter-gridlock*. I went every which way. When I wrote those two books, I had just barged in. But now, more than forty years later, all sorts of considerations that I had by-passed at the time started turning up. A lot was due to things of my own and to others that had developed since then. So, I'd write six or seven pages; then another tangent would seem needed, and I'd start over again, with the same baffling outcome. Instead of *no* way out, there was a clutter of ways out, each in its own way running into something that cancelled it. Every such turn was like "the return of the repressed," for it involved considerations that, if I had dealt with them at the time, I couldn't have done what I did do.

The title makes clear how our conversation is Burke's table talk at a time when he is near the completion of his theory, but it indicates, as well, an enduring aspect of his style and thought. He has *always* moved at tangents, provoking admiration and frustration. In 1935, R. P. Blackmur compared him to "Charles Santiago Sanders Peirce for the buoyancy and sheer remarkableness of his speculations," and contrasted his method to I. A. Richards':

> As Mr. Richards... uses literature as a springboard or source for a scientific method or philosophy of value, Mr. Burke uses literature, not only as a springboard but also as a resort or home, for a philosophy or psychology of moral possibility.[5]

Blackmur also notes how Marianne Moore's description of Edmund Burke as "a psychologist—of acute and racoon-like curiousity" applies equally well to Kenneth Burke who worked with her at *The Dial*.

Another friend, Jerre Manjione, quotes an unidentified critic who appreciates Burke's ability to keep moving:

> Burke's thoughts are as elusive as shadows. Getting the gist is like trying to put salt on the tail of a brilliantly plumaged bird. Once you think you have him firmly in hand, you find yourself clutching a vivid tailfeather or two while he has gone off again.[6]

In conversation, he operates with the qualities of a master comedian, ironist, and dialectician. The interview gives a more sedate impression of our encounters which were always spirited, often hilarious, and sometimes uproarious—as when Burke, discussing Emerson and Whitman, suddenly bounded up from his chair to exclaim: "I'm a giant! At 5'4" I overtower Balzac by a whole inch." Whereupon he went in search of this poem:

> But for those lucky accidents
> Were I not tall and suave and handsome
> were I not famed for my glamorous Byronic love-affairs
> had not each of my books sold riotously
> had not my fists made strong men cringe
>
> did not my several conversions
> enlist further hordes of followers
> and did not everything I turned to
> make me big money
>
> despite my almost glorious
> good heath of both body and mind
> how in God's name
> could I through all these years
>
> have held up
> and held out
> and held on?

He explained:

> When I wrote that poem, all of a sudden I understood Whitman. Right there on his page, he built himself a character. Was his family riddled with disease? No problem: In his poems he could rejoice that he was born of a stock ideally healthy. The formula is simple: Anything you wish you were, just *be* it. Let your "Song of the Self" be an invention such that even you yourself need not be clear to yourself just when you are confessing, professing, wishing, attaining, and downright lying—and the outcome will be such that (like with much of Emerson) you don't care. *It has a lift*. If you want something, just let your lines reach out and take it. And if not, why not? And insofar as a "poetic" part of us all gropes in that direction, your plea to *get admitted* is *already in*.

Burke in person is most like his poems: impromptu, gnomic, aphoristic, able to dazzle his listeners and return them to fundamental knowledge while providing witness to the astonishing mores of daily life.

Identifying a central quality of Burke's method as "imperviousness," Benjamin DeMott writes:

> The sage of Bennington argues with endless invention for the necessity of seeing around the spoken or written word, the announced intention, the "successful" enterprise in persuasion —in order to register the extent of the wordman's probable deflection from the X that is not words.[7]

"The X that is not words" Burke defines as "the objective recalcitrance of the situation itself." When Frank Gillette asked him how he arrived upon the use of the word recalcitrance, Burke got up and went to the dictionary, saying "I believe it comes from the word meaning heel" and checked the etymology: "Yes, *calx* is heel, *calcitrare* is to kick somebody in the heel. Another word is *inculcate* which brings it around the other way." Burke, like Richard Blackmur and Charles Olson, uses the dictionary, which he calls the good book, for daily exercise. This goes back to an incident in childhood which he also attributes to Herone Liddel:

> The first thing of importance that had happened to Herone Liddel following the accident of his birth was a near-fatal tumble he had taken about the age of three. Spitting meditatively from the height of a second story, he lost his balance, and fell at an angle on his head. Subsequently, he tended to assume that he hit the ground before his own spit.[8]

Burke couldn't attend school for years, and carried around a dictionary in preparation for the event. Thus he started to become an extraordinary auto-didact in the distinct American tradition.

We found Burke to be, true to DeMott's description, "that rarest of men, a good humored original genius." Frank Gillette offered a face-to-face homage:

> Your lexical freedom, your unwillingness to fix at any specific

> point, to use your term, "a cluster of associations" has been a constant source of liberation for me, and I mean liberation in the *pious* sense of the term.

Gillette is referring here to the chapter "The Range of Piety" in *Permanence and Change* where Burke first quotes Santayana's definition of piety "as loyalty to the sources of our being" and then provides a definition of his own: "Piety is *the sense of what properly goes with what.*"

Although Burke has been pre-occupied with the problems of summation, as well as several difficult Northern winters to which recent poems testify, he has not been deterred from other lines of investigation, and he always had something fresh in hand. Most of his recent work has appeared in *Critical Inquiry*, and now he is working on a theory of narrative in response to a Chicago symposium. "Bodies That Learn Language"—a work in progress—is the final reduction of his epistemology *Logology* which he distinguishes from his ontology *Dramatism*. Other articles he put into the record are: "Variations on 'Providence'"[9] and "As One Thing Leads to Another" published in an issue of RANAM (*Recherches Anglaises et Americanes)* that honors his work. From the latter he read us a definition of language he attempted after George Steiner[10] had written how difficult it would be to succeed at one:

> Language is:
>
> The arbitrary conventional medium of symbolic expression and communication that is best equipped to discuss itself and all others.
>
> Its three offices are: to inform, please, and move those persons who are familiar with its conventions.
>
> In its ability to inform, it has proved itself the collective mode of symbolic action that has comprehensively organized the study of its nonsymbolic ground (the realm of motion) and of situations and processes involved in our relation to the complex of symbolic and nonsymbolic factors affecting human conduct.

Burke adds this footnote:

> The first clause is the only way I could find to differentiate language from other mediums (such as music, painting, dance, sculpture). And this reflexive function is important with regard to the connection between language and "thought," and the notion of "thought" as "inner dialogue." Every medium can comment on itself, but language seems most able in this regard...The second clause is adopted from Cicero.[11]

Burke is justly compared to Roland Barthes, as he (two decades before Barthes) moved literary analysis decisively and playfully in the direction of the social sciences.

Frank and I both came into significant contact with another protean thinker who moved at the boundaries of disciplines, Gregory Bateson. We were anxious to sound Burke out, since we knew the two had met in 1949 at a conference at the San Francisco Art Institute. (Sitting between Burke and Bateson is Marcel Duchamp, the artist who exemplified a range of paradox which Bateson and Burke approach by more explicit methods.) Burke wrote, as long ago as 1937, that "among the sciences, there is one little fellow named Ecology, and in time we shall pay him more attention." Bateson, in the last decade of his life, considered "the effects of conscious purpose versus nature." Bateson approaches Burke:

> ...a peculiar sociological phenomenon has arisen in the last one hundred years which perhaps threatens to isolate conscious purpose from many corrective processes which might come out of less conscious parts of the mind. The social scene is nowadays characterized by the existence of a large number of self-maximizing entities which, in law, have something like the status of "persons"—trusts, companies, political parties, unions, commercial and financial agencies, nations, and the like. In biological fact, these entities are precisely *not* persons and are not even aggregates of whole persons. They are aggregates of parts of persons.[12]

Burke, writing last year on his adopted state of New Jersey:

> If more and more pollution is to be our state's future, all such polluters can get themselves the best berths on a sinking ship. And they can die rich in ripe old age, and even honored by their fellow citizens. For the ship that is sinking is the ship of state, and indications are, from all over the nation, that such a ship will never go under, wholly. It can just go on sinking and sinking as a place to live in, while there's always the likelihood that those with funds enough can invest in better berths not yet so polluted, elsewhere.[13]

We found that Burke had just finished a paper on Bateson, and then had immediately added several pages after reading a review of Bateson's *Mind and Nature* by philosopher Stephen Toulmin.[14] He also told us how he upstaged Governor Jerry Brown at a dinner honoring Bateson shortly before his death. Burke was the *next-to-last* speaker and brought down the house by singing a song he'd written about "everywhere the double bind." He put us down in his calendar as "the Bateson boys."

Most memorable is how Burke still wrestles with two of his masters: Kant and Nietzsche, as he indicates here in one remarkable series of parentheses that reviews the foundation of his critical method. But he is attentive to new work and pointed to Richard H. Brown's *A Poetic for Sociology* which proposes "cognitive aesthetics" as a logic of discovery for the human sciences. Burke's response: "I just welcome him," and at another point: "The book's a great shopping list." Brown selects work in neighboring domains, as Burke did in *Permanence and Change*, in order to demonstrate parallel motives in art and science. He attempts to establish criteria of adequacy for a unified theory:

> Cognitive aesthetics, we argue, has four principal advantages. First, it permits us to move beyond copy theories of truth in both art and in science. Second, it provides a framework within which the pioneering artist and the pioneering scientist are both seen as involved in essentially the same activity: making paradigms through which experience becomes intelligible. These two advantages give birth to a third and fourth; for if art and science are seen to have an essential affinity, then the possibility is opened for a fusion of the two principal ideals of sociological knowledge: the scientific or positivist one, stressing logical deductions and controlled research, and the artistic or intuitive one, stressing insights and subjective understanding. Finally, insofar as such a fusion is possible, cognitive aesthetics provides a source of metacategories for assessing sociological theory from any methodological perspective.

By doing so he makes clear how prophetic Burke's original investigation of behaviorism and positivism was:

> ...this essay takes an aesthetical view of rationality. Just as scientific theories require aesthetic adequacy, works of art present a kind of knowledge. For cognitive aesthetics, both science and art are rational in that they both presuppose various criteria of economy, congruence and consistency, elegance, originality, and scope. Such criteria are those by which

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BRIDGE-WORK / "FR THE OLD DISCOURSE TO THE NEW"
charles olson

NOTES ON TOPOS, TYPOS, TROPOS — Charles Olson

Interviews

COUNTER-GRIDLOCK — Kenneth Burke
CIRCUMCISION AND ABJECTION — Julia Kristeva

Dialogues

A TELECONFERENCE ON COMPUTERS AND ART — Frank Gillette, Brendan O'Regan

CONSENSUS AND THE ONTOLOGY OF ART — Harley Shands, Frank Gillette

Articles

A CRITIQUE OF THE DOMINATION OF NATURE — Trent Schroyer
BIOREGION AND HUMAN LOCATION — Peter Berg
AN AMERICAN AND OTHERS — Alan Sondheim
KENNETH BURKE AND CHARLES OLSON — Sherman Paul
THE IMPLOSION OF MEANING IN THE MEDIA — Jean Baudrillard

Reviews

Paul Metcalf
David Finkelstein
B.P. Menon

Photography

Berenice Abbott
From:
MIT, IBM, Bell Labs
Museum of the City of New York
The Glomar Expedition
Edison Archives

Poetry

Miguel Algarin
Aaron Fogel
Clayton Eshelman
William Margolis
Jim Krell

* Roy Skodnick

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we organize experience into formal structures of which "knowing" is constituted.[15]

Burke's "poetic" perspective or "methodology of the pun" is the precursor of cognitive aesthetics. Like Burke, Brown presents an anatomy of metaphor as a primary means of demonstrating how knowledge is perspectival. Thus Burke:

> The metaphorical extension of perspective by incongruity involves casuistic stretching, since it interprets new situtations by removing words from their "constitutional" setting. It is not "demoralizing," however, since it is done by the "transcendence" of a new start. It is not negative smuggling, but positive cards-face-up-on-the-table. It is designed to "remoralize" by accurately naming a situation already demoralized by inaccuracy.[16]

I was not surprised to find Burke reading Roy A. Rappaport's *Ecology, Meaning, and Religion*[17] which combines the ecological perspectives of Bateson with Burke's analysis of how social action determines varieties of linguistic expression. He now participates in a combined discipline of anthropology and sociolinguistics, as his one-time student, Dell Hymes makes clear in an important review of *Language as Symbolic Action*. Burke's theory of language as gesture, first applied to poetry, is now a subset of "the ethnography of speaking." Hymes writes:

> The revival of interest in the ethnography of symbolic forms (myth, ritual, song, chant, dance, and the like and the subtler forms of daily life)...promises development of work from which a truly comparative "rhetoric" and "poetics" may yet emerge...such linguistic ethnography will impoverish itself if it does not build on the insights accumulated in the tradition Burke extends and enriches.[18]
>
> * * *
>
> The impression of ritual language on its hearers is one of some strangeness. The use of dialect variants contributes to this strangeness. Words are used in a variety of ways that make them slightly discrepant from their ordinary usage; but the concurrence of each of these words with another that signals its sense creates a kind of resonant intelligibility, an intelligibility that varies from individual to individual. This ritual code, in its entirety, is probably beyond the comprehension of any of its individual participants. To these participants, it is an ancestral language which they continue. It is a language into which individuals 'grow' as their age and acquaintance increase. This process should last a lifetime and tales are told of former elders, who—as they approached extreme old age—ceased to speak ordinary language and uttered only ritual statements.[19]

A note on the photographs: No one has a finer sense than Kenneth Burke of how technological change has revolutionized the cities and landscape of America in this century, an acceleration of scale and event he analyzed and resisted in exemplary ways. It is appropriate to note here that Burke lived without electricity and running water in Andover until the late sixties. His position of "agro-bohemian" anticipated by now familiar solutions to the current crisis; and like Scott Nearing, Lewis Mumford, and Paul Goodman, he is an exemplary figure who lives his thought from the ground up. From the photography collection of The Museum of the City of New York, we selected material that would give some sense of the city Burke knew as a young man, as Jack of all trades editor at *The Dial* during the twenties, and as a social analyst during the decade of the thirties. We discovered that Burke had shared an apartment in the village with Berenice Abbott and other equally notable figures, including Djuna Barnes, Hart Crane, and members of the original Provincetown Players.

The photographs from the Edison Archive were suggested by a discussion not included here, but excerpts are used as captions. Burke's daughter, Mrs. Elspeth Hart, graciously allowed me to copy the photographs of Burke as a child and young man; others are from the collection at The American Academy and Institute of Arts and Letters; the pictures of Burke and Empson are from the Kenyon College Archive. I would like to thank Frank Gillette, John Johnston, Brian Thomas and, of course, Kenneth Burke for help in preparing this interview.

R.S.

[1] "Our Ancestors Spoke in Pairs," James J. Fox, *Explorations in the Ethnography of Speaking*, eds. Richard Bauman & Joel Sherzer (London; New York: Cambridge University Press, 1974).

[2] *Catastrophe Theory*, Monte Davis & Alexander Woodcock (New York: E.P. Dutton, 1978).

[3] "William Carlos Williams, 1883-1963," *Language as Symbolic Action* (Berkeley: University of California Press, 1967).

[4] Several important discussions are, therefore, not included, but the reader should know the total agenda. We spent a good deal of time on Burke's theory of the negative, after I asked him if he agreed with Bateson that a pre-linguistic negative exists in the hierarchical play among wolves. Cf. "A Theory of Play and Fantasy," *Steps to an Ecology of Mind* (New York: Ballantine, 1972). Burke summarized his work on the negative in an operatic recitation that took us through examples from Bergson, Kant, Hegel, and Marx. (Cf. "A Dramatistic View of the Origins of Language" in *Language as Symbolic Action*.) Frank Gillette enjoined Burke in a long dispute about free will and determinism, "the Fruit/Of that Forbidden Tree..." and the sacramental nature of Christ. (Cf. "The Temporizing of Essence" in *A Grammar of Motives*, pp. 430-440 and *The Rhetoric of Religion*.)

[5] "The Critic's Job of Work," *Form and Value in Modern Poetry* (Garden City, New York: Doubleday, 1957).

[6] *An Ethnic at Large* (New York: E.P. Dutton, 1978).

[7] "The Little RedDiscount House," *Hudson Review* (1962-63), re-printed in *Critical Responses to Kenneth Burke* (see complete reference below).

[8] "The Aenaesthetic Revelation of Herone Liddel," *The Complete White Oxen* (Berkeley: University of California Press, 1968).

[9] *Notre Dame English Journal*, Summer 1981.

[10] George Steiner, *After Babel* (New York: Oxford University Press, 1975). See also Burke's review: "Above the Over-Towing Babble," *Michigan Quarterly Review* (Winter Issue, 1976).

[11] RANAM is published by Université de Strasbourg, France. Cf. Elizabeth Neild, "Kenneth Burke and Roland Barthes: Literature, Language, and Society." The Burke issue is No. XII, 1979.

[12] "Effects of Human Purpose on Human Adaptation," *Steps to an Ecology of Mind (op. cit.)*.

[13] "In New Jersey, My Adopted, and I Hope Adoptive State," *New Jersey Monthly* (November, 1981).

[14] *Rigor & Imagination, Essays from the Legacy of Gregory Bateson*, eds. C. Wilder-Mott and John H. Weakland (Praeger, 1982).

[15] *A Poetic for Sociology* (London: Cambridge University Press, 1977).

[16] *Attitudes toward History* (New York: Beacon Press, 1958).

[17] *Ecology, Meaning, and Religion* (Richmond, California: North Atlantic Books, 1979).

[18] Dell Hymes, *Foundations in Sociolinguistics* (Philadelphia: University of Pennsylvania Press, 1974). Cf. Chapter 7 "The Contribution of poetics to sociolinguistic research." See also *The Social Use of Metaphor, Essays on the Anthropology of Rhetoric*, eds. J. David Sapir and J. Christopher Crocker (Philadelphia: University of Pennsylvania Press, 1977). The book is dedicated to Kenneth Burke, Logologist.

[19] Fox, *op. cit.*

FG: We brought some champagne, KB.
KB: Oh, Champagny-water!
FG: Have you got the Viennese crystal? We just discovered Pely and I grew up in the same neighborhood in more or less the same time. You spent time in Weehawken?
KB: Oh, yes.
FG: Well, here we are. We're all from Weehawken in a sense.
KB: Well, I'll be damned! I didn't realize...when I first came to New York, that's where my parents lived, on Boulevard East.
FG: My home turf. Where Union City and Weekawken come together.
PD: You know that hospital on the Hudson? My father used to run it.
KB: One of my daughters was born in that hospital!
PD: That's named after my grandmother. Only an Italian would do that.
KB: Yes sir, one of my daughters was born in Weehawken. It's part of New Cuba now, isn't it? I remember we were right over where the tunnel goes through. This was during the First World War. Of course, there were army men up there guarding that place. There was the risk that the Germans would blow up the tunnel because of the war goods going through there.

We had an old German music box, a wonderful old Regina music box, beautiful old structure. My dad and I were sitting in the back room. All of a sudden we heard my mother put on *Die Wacht am Rhein*. We rushed in and turned it off as fast as we could.

There used to be many old German beer halls in that area, lovely old places. Some were still around when we were there. If you walked out from Boulevard East half a mile, you were in the country. Oh yes, and the old man had an electric car, and he just couldn't get up that hill.
FG: Between Weehawken and Hoboken.
KB: Yes.
RS: You were at Columbia only a short time. Why did you quit?
KB: I was a dropout owing to a situation of this sort. All the courses I wanted to take were there. I didn't drop out because I was disgusted with school. But I only expected to take an A.B. degree and many of the courses I wanted to take were available only for post-graduate work. I'd already taken six years of Latin, and I wanted to take a little medieval Latin. No, I had to do that in post-graduate school. Now often colleges don't have Greek! But I had taken two years of Greek in high school, and I wanted to do the Greek Anthology. No, I couldn't do that until later. So I told the old man, "Pap, I'll save you some money. Let me go down to the Village, and give me just a fragment of what it costs you to send me to school there, and I'll keep up with my work." Well, I did. I went down there and did keep up with my work.
RS: What was the Village like then?
KB: One of the first guys I met there was Joe Gould. Remember old Joe? Oh, he was a fantastic creature. He lived on booze and cigarettes and ketchup. He was a mixture of...he was half insane and half brilliant as hell.
FG: A rather lethal combination. What was his demise? What did he do?
KB: He was writing a history of our times. He had whole files of these things. I don't know where they all disappeared to. He'd go to places like insane asylums, write up little bits of this and that. Ezra Pound got some of that stuff published at the time. When my *Counter-Statement* came out, Joe came around to see me. He came in and asked me all about the book. That was during prohibition. We made our own booze. We made a rice wine that was pretty effective stuff. I started plying Joe with the rice wine, and Joe kept on discussing the book with me. I knew of course that he was coming for a shakedown. But he was discussing the book, making quite relevant comments about it. Finally after we'd talked about it for quite awhile, he said, "I hate to flatter someone who I'm going to ask for money, but that sure is strong wine."
RS: You bought this place in the early '20s?
KB: I bought this place around '21.
RS: Then you moved out?
KB: In the summer I'd stay out here, and in the winter I'd stay in town if I had a job, like when I got tied in with *The Dial*. My god, the kind of life you lived then! You'd go down to the Village around late September or the beginning of October and rent one of these old railroad apartments where in the kitchen you had a sink and a big tub. There was also a tub in the can out in the hall. But my god, you couldn't bathe in that! There was no heat. You kept junk in that. There was a big vat in the kitchen which you used for everything. You did your laundry in it, your dish-washing and bathing. And there was a coal stove. And the rest of the house would be wholly without heat.

I'd pick one of these places and pay by the month. You'd go in in the fall, pick up one of these places—and in spring put your little junky stuff back in storage and come out here. We did this again and again. It's a totally different kind of life now! If it took me more than two or three hours to find a place, I'd think I was put upon. Sometimes I would stay out here all winter and heat the whole place with wood that I sawed and chopped up myself. But that's only if I didn't have a job in New York. When I bought this place I paid off the mortgage the first year. So, during the damn smash-up, I always had this place to go to.
RS: When you did that research on drugs in the '30s, who was that for?
KB: I had a job with the Rockefeller Foundation back in the 20's. Colonel Arthur Woods was the head of the Rockefeller Foundation at that time, and he was also assessor in the League of Nations, the drug commission. Arthur Woods had been a member of a reform administration in New York. He was police commissioner. Later he financed some studies on drug addiction. He represented the U.S. committee on dangerous drugs in the League of Nations, and he needed a ghost writer and I got that job.

I worked on it for a year and a half. The magic word "Rockefeller" opened all doors for me. I could ask any question. Endocrinologists, they'd tell me anything. Ironically enough, all my notes on that stuff have disappeared. All that work I'd done just vanished. The stuff I used in *The Philosophy of Literary Form* was part of it. I wouldn't have any of it but for the parts included there.

In those days people would just walk in and sit down. I didn't know who the hell they were. It was a crazy world then, of course, it was nutty as hell. Trouble was, as far as I was concerned, I was afraid I was going crazy anyhow.
FG: This is the early '30s?
KB: Just about that time. I even wrote fantasies of super-



Four generations: K.B. with mother, grandmother, and great grandmother.

Hitlerite villains, all kinds of stuff. Some of it turns up once in a while, but most of it's vanished. Maybe it's in the FBI files for all I know. That was such a crazy period. You thought you were going crazy anyhow, and I damn near was. You never knew what's natural and what isn't natural. I was going to have lunch with a guy I'd known quite well. He was a leftist fellow. I'd rushed a shave and had had a drink besides. Had a little blood on my face, and he asked, "What happened to you?" He thought I'd been in some goddam messup or something. I had to tell him I had a new blade in. That was just normal. That was the way everybody was. Honest to God that's the way everybody was.

I've had three stretches of magic: working for Colonel Woods doing the ghosting job, working for *The Dial,* and working at Bennington. They were all wonderful. The whole three were just from a different world. Everyone was a different world. You do have those.

RS: Could you describe your experience at Bennington?

KB: At Bennington I found working with students...I really understood the actual...it's a strange situation. I'd get to working with a student, and my god, we were so involved in her work! It was really a world apart. Terrifically. I once had a student—she was a beautiful girl, and she was interested in dance. She wanted to write original stuff—and I'm not so keen on kids writing. I'd rather work some other way, translating or something like that.

I said, "Tell me some writer you really like, a short story writer, and let's have you do a one act play, turning that stuff into a drama." She was in drama and dance and knew that field. She liked Katherine Mansfield, so we started to work on her stuff. I swear to God, we learned things I'd never realized! In the *story* you see it all quite clearly. You start to turn it into a drama all of a sudden there's *one* sentence that seems to need a whole extra *scene.* You get so involved in such stuff you're just *living* in it! The joint work becomes engrossing.

When I first got there, I inherited a fantastic story. Bill Troy had a group of students who proved their great literary ability by never producing anything. Only the vulgar produced. The lowly sociology students—they could write. But the literary elect were beyond that. I had this whole group, and I flunked every goddam one of them. But with the understanding that they could come back. They all finally did. The last one ten years after I flunked her. This was one hell of a way for a student to prove herself a great literary champion. Yet I did discover this: The real potential writers *did* suffer. The mutts could write any goddam thing!

I used to figure things out this way: I decided that I'd divide my "counselees" into three groups: The students you would think of as being set for marriage, the students you would think of as being set for careers, and the students you would try as much as possible to help keep out of the nut house! Those were the ones I inclined to love most.

PD: They became the faculty!

KB: Consider the situation. Every word that a student writes you are there to be concerned with. Then she goes out and tries to write a book—and who cares? The rules are totally different. Students really are marvels. They start out wonderfully. But the situation is so damned unique; and it can't go on. From the standpoint of betterment, I began to talk about finding some way of easing things off.

RS: I hadn't known you did all those translations.

KB: I did all this work in German, and my translation of *Death in Venice*—Auden said, "This is it!" And that put it

over. He was part of the family too. Then Mann came over. And since I had done all this work translating him, his essays, his lectures, his letters, and so on, they put me up there sitting next to Mann—and my god, I couldn't follow his German! [Bill Troy heard about this incident, when Mann himself didn't know English very well. And Bill told in my presence how, when I explained to Frau Mann that although I had done much *translating* of German I had trouble with it as *spoken*, Frau Mann said to Thomas, "*Nicht sprechen, übersetzen.*" Bill had been drinking straight whiskey out of a jelly glass on a private occasion when I had gone to join in doing him honor. In an astoundingly few minutes he had gone from being personally charming to the kind of eloquent literary improvising that he was rightly famed for, to this anecdote when the adrenalin that alcohol releases had begun to take over, a stage followed almost immediately by his passing out totally stoned on the floor.]

* * *

FG: *Permanence and Change* wasn't published until 1935. Did you write it out here?
KB: I wrote most of that out here. It was published in 1934 or 1935. Actually, when I first wrote the book ...this is why I believe in the whole matter of language as motive... that your own vocabulary hypnotizes you. I'd written all this stuff on *perspectives*, and when I got through, it was so much more real than the world. If I would talk to somebody, I had a feeling that there was a piece of glass between us...really terrible...it was a really unpleasant notion. In those days I was playing a lot of ping pong at night. I would lie awake imagining a ball going back across the net. That seemed a way of making the two sides nearer alike than the image of being on two sides of glass. And finally things did ease up.

In rewriting, redoing, this whole thing, I've literally thrown away 170 pages as false starts. I finally decided that the middle section, "Perspective by Incongruity," is the essence of the whole business, and I began to work on cutting it down. Perspective by incongruity is a way of seeing two ways at once. It's the whole principle of an ironic approach to something. One of my favorite examples is Veblen's concept of "trained incapacity." They're opposites...he introduced the expression when referring to those who in being competent as businessmen were not competent to look at a situation otherwise. In that middle section I have all kinds of variations on that theme.

And by God, I did start seeing double. I got wild. I had to write twenty pages, but things dragged on and on. So in my impatience on having it pile up the more I tried to cut it down, I would drink a little bit.

I don't drink while I'm writing, but I would take a drink. And by God, you can't imagine what a sybaritic delight it was when, after getting out of this tangle, I could look down the road and see just one car coming. It was such a privilege. I was working here in the summer. When I heard a car I'd rush out looking to see if *only one car* was going down the road ...wonderful.
FG: How long did your period of double vision last?
KB: Well, it lasted a couple of months. With everything I've ever written, something of that sort turns up. I believe, absolutely, you do get hooked to a vocabulary. If you really do live with your terms, they turn up tricks of their own. You can't get around them.

FG: What dynamic is at work and responsible for such a fix?
KB: They do fun you by vocabulary. When you finally get down to where you're making your own terminology, then by god, you're making your own destiny too. You're picking the terms and they always have an angle beyond which you use them and then *they* use *you*. There's no question about it. Sometimes a person writes a book and the book sells well, and he writes another book...and it's wonderful. He's making money. Then it turns out that his way of writing gave him psychogenic cancer! That's a part of the anguish of your body when you were writing these books. Take someone like Sylvia Plath. Here's a woman who really lives with her work, means it, every damn thing she writes. She gets more and more efficient on suicidal themes. Then you're going in that groove...
FG: You're preparing for suicide.
KB: But the point is, you're reducing your range. For instance, I've tinkered with that suicide line all my life. But at the same time, I also work with ideas of how to contrast it, how to make it contain other schemes. She must make it more efficient: how to be more suicidal!
FG: But there's dramatistic element in Plath's suicide as well. It was her third or fourth attempt, I believe, before she succeeded.
PD: The housekeeper didn't come.
FG: There was some unconscious mechanism.
KB: You get suicide so clearly in the Japanese: *hara-kiri, suppuku*, two words they use on it. A lot of suicide is accusation. The technical, traditional way of doing it is to kill yourself on the doorstep of the guy you're after... It was her relation to her husband; she was attacking him.
FG: Basically accusing him of murder.
KB: Let me read you my suicidal poem.
FG: Suicide is appropriate for the last day of the year.
KB: I was out here two years in a row. That's why I'm so goddam glad to get away. Two winters in a row alone out here. The first one was absolutely incredible. There was a series of rains that froze. This whole section was one big chunk of ice. Then the second year was mild. But two years of that, then came spring. The irony was that spring was at least the resolution, but here's what happened:

BELATED ENTRANCE

Yes, can fight the other seasons,
but I can't fight spring.

So now, late March, consider *me*
forcibly defenseless against the ravages

of a call that, near 83,
I could not adequately answer

e'en if they gave me bbls.
of money
to squander on the project.

A quiet calm, infiltrating desolation settles
in and about the problematical Subject (the Selph)

A Spirit come to dwell within me,
saturating same with its O'ver-All Context of Situation—

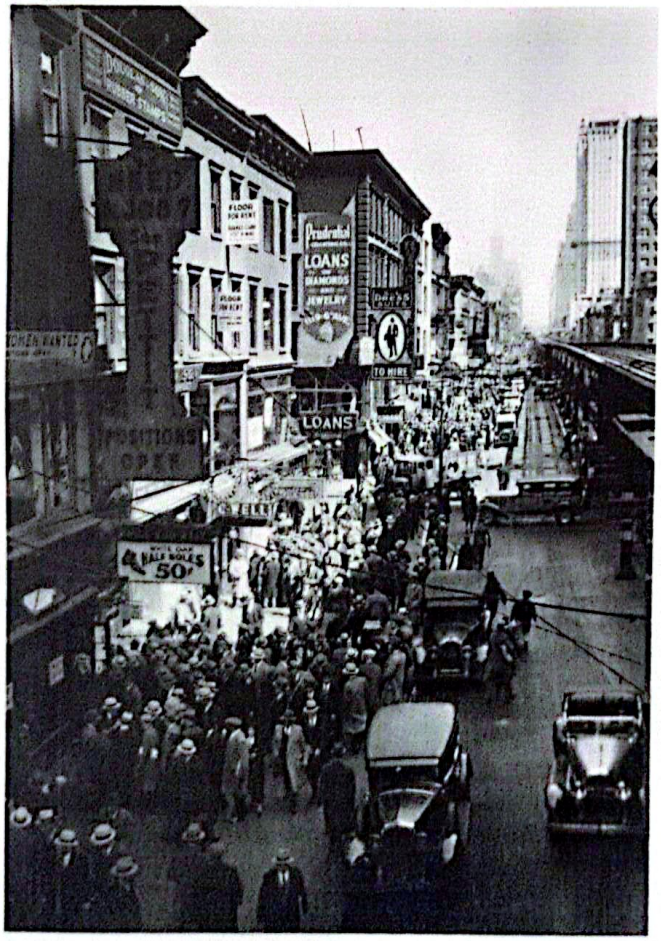
and all would be like to commit hara-kiri
except for lack of guts enought to cut one's guts out.



Christopher and Bleecker Streets, June 18, 1936. Photograph by Berenice Abbott. Federal Art Project "Changing New York" Museum of the City of New York.



Holland Tunnel Construction. Anonymous, The Museum of the City of New York.



Looking north on Sixth Avenue from 42nd Street, April 1932. Photograph by Byron, The Museum of the City of New York.

FG: "April is the cruellest month..."

KB: Oh, yes, that's the idea. The other seasons you can fight. You know, I was the guy who did the paste work on the *The Waste Land*, putting *The Waste Land* together for *The Dial*. I spent the whole night on it because [Gilbert] Seldes was so particular. You had to fix it in such a way that you could know where the spaces were. I put it one way, it wouldn't fit, and he wouldn't allow it a little bit. Yeah, layout. Eliot wasn't even around. He was in London.

RS: Did you have any contact with Pound?

KB: The publisher sent Pound a copy of my *Counter-Statement*, and I got a very friendly letter from Pound about it, but he embarrassed the hell out of me because, in the course of saying nice things about my book, he put me in a bad light with the publisher. He talked about what a lousy publisher, so I didn't want to handle it.

RS: How did you get to Remy de Gourmont, through Pound?

KB: Remy de Gourmont died when I was working on him. I was so damned dumb in my early days. This article I wrote on Mann and Gide in *Counter-Statement*...Gide sent me one of his books, signed his own name, but I didn't even acknowledge it. That's what I mean by suicidal. How stupid I've been!

FG: Did you ever take any drugs?

KB: Nothing but alcohol. I think what saved me was prohibition. All that goddam stuff. Every night I got sick so I got rid of it. I wasn't proud. If I'd have kept my liquor, I'd been gone a long time ago. Most of it was junk, you know. Every bit of it had chemicals in it. They denatured the denatured. Everyone would put some denaturing in it. Then the bootlegger would take some of the denaturing out. My body wouldn't put up with it.

FG: It's all a seeking for transcendence. Alcohol, all drugs, whatever, is an attempt to achieve transcendence. Authority believes you can control transcendence with doxological methods, through ceremony, through ritual, through language. But if they believe that the expression of personal transcendence is pure escape external to their ritual, then it's prohibited.

KB: I was up at Wesleyan. I was going to an alcohol party, and I went through a room where all the kids were glazed in darkness. My god, what a muddle. They weren't doing anything. But we were going to yell and drink.

RS: It was an interesting moment: the necessity of abandoning language because language had been so reduced to control.

FG: It was synonomous with the awesomeness of authority. In this case, transcendence is associated with non-verbal forms exclusively. Transcendence is not associated with a poetic message, but with a chemical one, direct mediation between your body chemistry and some external influence.

KB: I think sometimes it's the attempt to be all body. The rule I'm most proud of is this one: The only cure for digging in the dirt is an idea. The cure for any idea is more ideas. The cure for all ideas is digging in the dirt. That 's the whole damn thing. Body back to body. That's your relation between ideas...that's the body talking for you. I think people who take drugs frustrate the completion of symbolism. The drugs cut corners! When I look back over my life, and all the hours I've spent under alcohol, I think that's my lostness.

FG: You associate it with loss...

KB: I'm trying to answer a call across a gulf that can't be

crossed. I feel that. Every once in a while, I hit a couple of notes on the piano that just get the damn thing. They get what I wish I could do every time. But not by accident, not by alcohol, but just by doing it that way. I wish I could write a whole thing like that. If you haven't created them spontaneously, you haven't really done them. If you haven't done them with your whole full self. I believe that our animal, ideally, our animal...must really face these things right up close. Sometimes people will ask me, "Have you got this done? You're trying to stop things." I say no! I've got out of this...I don't know what you call it...the most terrifying development. We have a lot of it here already, and that is what we do from now on. We use these damn machines on us...What is going on in me now when I'm talking to you? What is going up and down inside, and therefore what's going on in me when I say the word that makes me horny, or say a word that makes me disgusted. What's going on in my body? And I think for the first time in the world's history, our technological machine has got the resources to check on that. And what we have is a totally new kind of disassociation. I am out there, recorded on a dial. Who am I? Here I am, a person, and now that stuff! And I believe it will give us an ultimate. I can even believe—the irony of this—I suddenly get a little notion, all of a sudden, I can be pious again. I can see beyond. There is something! There is something!

FG: The origins of a new piety!

KB: I don't know. I get a little glimpse of it.
I don't know but there it is.

FG: That little glimpse is the intuitional glimpse of a new optimism.

KB: You've got these signs on you, things up and down, you're just a bunch of records on meters. They are reporting on you, just as when you're reading the dials on a car or an airplane. The problem of identity gets down to that. The irony of this whole business is that the future, a logological future of this sort would be—the irony of my resistance to technology—this would be a purely technological study. You'd have a machine recording you. Yes, the sort of "processing" they do now, working on their own blood pressure as indicated on a screeen and learning to control it. My notion is that every bit of us could be objectified that way.

Remember when Aristotle speaks of the tragic pleasure? This means you're enjoying crying. But when you're crying for someone you really have lost, that's not fun at all! Therefore there are two kinds of crying. That sort of difference I would show on the screen. Under those conditions, a body can be studied from the outside.

I have thought about an experiment like this. Take a movie or a play. You have 50 control people and 50 people in your theater. The one 50 would all be together and the control group would be isolated individually. I think you would have a recording of different vibrations with the individuals than the kind that happened with the one audience.

FG: Velocity of resonance, no?

KB: They fit into another, fit together; and I think it could show not just in attitude that the 50 people manifested a different kind of vibrating responding together.

FG: When it reaches a mob state, the resonance has melded into a coefficient of power That explains mob psychology.

KB: No doubt about it, and I think that's what Hitler was working on. The point is, as I see, you'd actually have for the first time in history, pictures of all these things going on inside you! When I had an examination some years back—I refer to this in the *Grammar of Motives*—the guy had me walk. He put various types of anodes on me. As I walked they were checking my gait. The record in itself didn't represent my gait; but if you had different kinds of people, their gaits would show up in different ways. The representations would show by comparison with one another. You'd have a complete diagnositc attitude toward yourself.

FG: But who is reading the diagnosis?

KB: Well, you have different views on that. Interpretation is something else again. The thing doesn't interpret itself. This applies to the polygraph test. These things are not as accurate as people think. I like that story of the guy who thought he was Napoleon. His analysts argued with him, trying to convince him that he wasn't Napoleon. Finally he agreed that he was not Napoleon. *The machine indicated that he was lying!*

FG: How about Coleridge and drugs?

KB: Coleridge was so promising in so many ways, he put up with it; but he moaned, he was wretched in his last years. There had been a honeymoon stage. That's when he wrote his wonderful mystery poems. After that he was shot. And for several years he was just down, nowhere; then he came back. From then on he lived with himself as a disease, and he was under a doctor's care. But he retained his wonderful ability to verbalize. The record of the *Table Talk* is engrossing.

FG: Would you say Coleridge functioned in the breast of Wordsworth, the surface of the earth, nature.

KB: Coleridge's great poems, the mystery poems, I would class under the head of what he would call fancy. I think it wasn't imagination. I don't think he thought that way. But I think those poems were adumbrations of the surrealists. "Kubla Khan" was their ideal: To write a poem out of a dream, and he did. Any one who snoots any of Coleridge has robbed himself. He was one of the most profound writers who ever wrote! And there was always something eating at him.

FG: What is the difference between Wordsworth and Coleridge? Constable said all his art can be found under any hedge. That's pure Wordsworth.

KB: There was a great ambiguity between Coleridge's and Wordsworth's relationship to the "imagination." Coleridge's mystery poems were really not the way Wordsworth saw it. Wordsworth was trying to situate the newness of language in its ability to reflect *reality* itself; Coleridge was seeing *another* realm, language that never was on land or sea. From the standpoint of Coleridge, that expression would mean something that *wasn't* there. What Wordsworth means is it's *really there* but you *didn't see it.*

PD: Did you see that R.P. Blackmur's book on Henry Adams finally came out? Blackmur's stuff gets better and better. The essay on *Ulysses,* for example, which everyone always forgets.

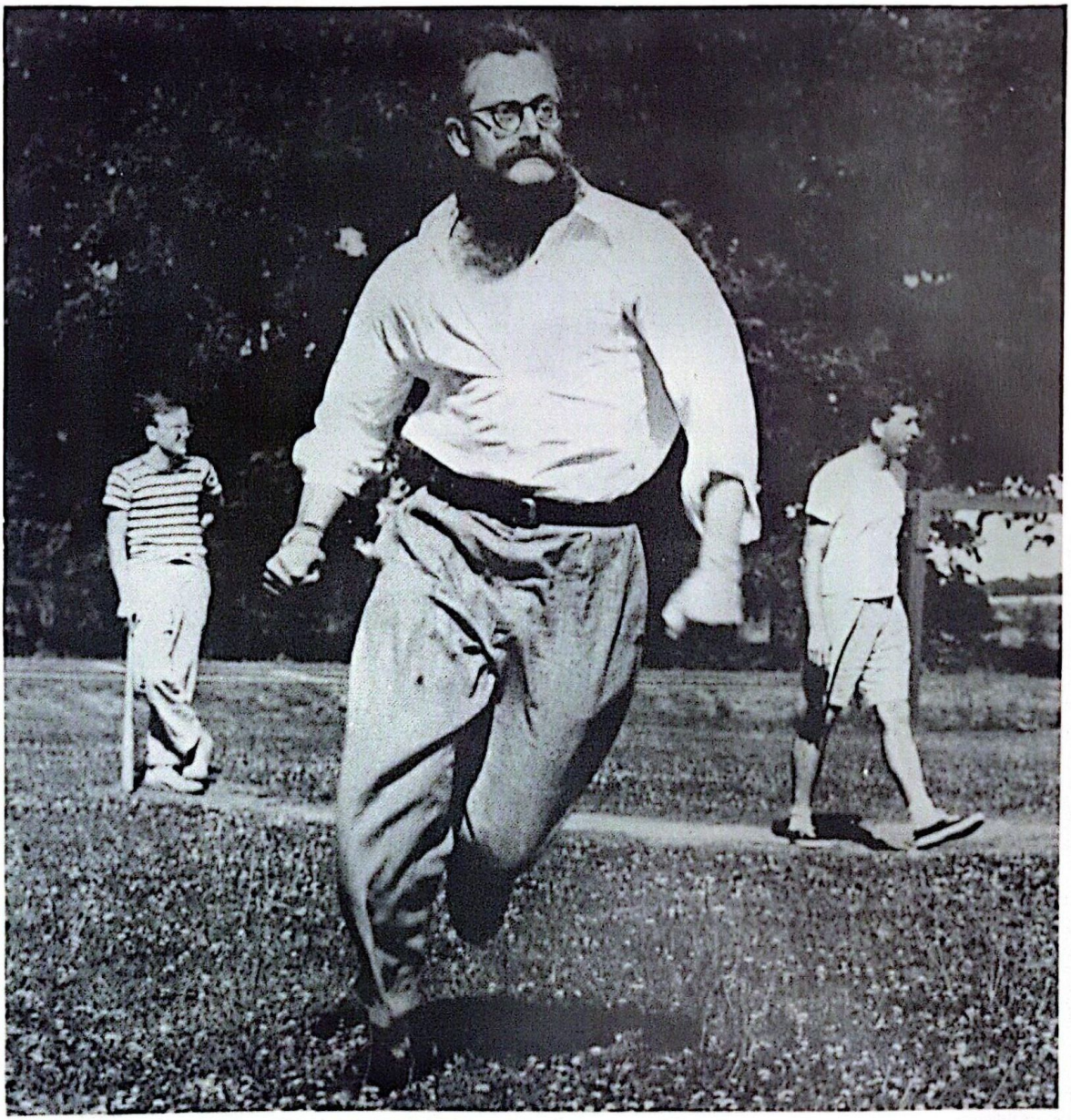
KB: There's no question about it. He has a real calling all his own. After a couple of paragraphs you get into it, you feel it. We had a strange relationship that way. We were both *auto-didacts* and pretty much close together. He was much better at academic politics than I ever was. One summer, I was going to be at Indiana, and I stayed with him and John Crowe Ransom. We rented a place, a beautiful little house! It was a lovely time. As a matter of fact, that lovely little house is now a parking lot. I did a review on one of his books. It was a dirty trick I did which nobody



Burke with class at Kenyon, 1950.



Empson with class at Kenyon, 1950.



Empson on the base paths.

realized. He gave two of my favorite proverbs, which I had already used: *Fides quaerens intellectum* and *corruptio optimi pessima.* [The first was an ideal statement of scholastic theology. One took faith on trust, but having accepted it, one proceeded to show why the position was rational. I have discussed it in my *Rhetoric of Religion* among other places. See there, page 12. The other, "the corruption of the best is the worst." is so far as I know a Latin proverb. I used it in my essay on Hitler's *Mein Kampf.* Dick got them both wrong. Whereas *intellectum* is in the accusative case, the object of "seeing," he made it a nominative. I wrote as though he had done this deliberately, to give some such other meaning as "faith a seeking intellect," or some such. And he made the other, *corruptio optima pessima,* which could have been interpreted vaguely as possibly meaning "corruption (is the) best worst." I forget exactly how I tinkered with them; but nobody knew the difference, and Blackmur never mentioned it to me. It is amusing that, at the time, I was entangled in the tangle myself.]

RS: You taught with Empson once at Kenyon?

KB: I found out we gave our classes at the same time, so we didn't even know what the other was doing. One night there was a party on, and by golly, I wasn't invited and I felt pretty bad. Still, they had parties all the time. I heard the noise across the fields, the talking, people having a wonderful time. I finally went to sleep and the next thing I knew someone was pounding on the door: Bang, bang, bang. "Wake up, Mr. Burke! Wake up, Mr. Burke! Mr. Empson is attacking you!" I rushed over. And Empson was sitting in the kitchen under the kitchen sink. He was going in good form, and every time he'd make a point he'd toss his head and hit the pipe and make it ring. I thought he might knock himself out!

That's one way to crash a party, right? I was in to stay. It went on all night 'till five o'clock in the morning. I never did find out what he had said though; by the time I got there he was on another subject.

We had our classes at the same time, and we discovered that we were both going to give a talk on *Coriolanus.* So we made an agreement we'd toss up as to who went first—and we'd never change a word or refer to the other's talk at all. It was funny, because in one way students feel inclined to show their attitudes in these matters. One guy, another member of the class, had a stunt which was described to me.

Empson had a quite picturesque way of lecturing. He'd be talking, then suddenly swoop down and glance at his MS, then race about the room, or suddenly start writing things on the board. Constant changes in tempo and style. The student started acting as though he were aiming a gun all over the place. He said, "You can't get a bead on him." It would be like him.

FG: *Seven Types...*

KB: I think his other book...

RS: *Some Versions of Pastoral?*

KB: Yes, is better than that. That's beautiful.

FG: But the effect of *Seven Types of Ambiguity* was torrential.

KB: I don't know if it's true but I've heard that originally he had but six types.

FG: Didn't like the number?

KB: Richards was said to have suggested making it seven, but I don't know exactly why.

FG: For Pythagorean reasons alone.

PD: Seven is more complete. Six is an impossible number. But three plus four...

FG: You don't settle on six, six is...

KB: I always think six in English is sex.

PD: Did you know Wallace Stevens?

KB: I knew him a little bit. He was given an honorary degree up at Bard. I went up there as a part of the outfit to honor him. My wife was with me, and at one of the meals she sat next to him. She said later, "Guess what Wallace Stevens asked me?" I said, "What's that?" "'Does your husband have insurance?'" I claim that the basic idea of Stevens' work...what's the word for it? The first idea. I think what he was really trying to do was, by imagination, to recall what it was like to see something *before* he had a word for it. In a sense, that's how he did see things originally. What he really was doing was aiming to regress.

PD: Trying to be innocent again.

KB: Yes. Can't be! The only way was to do it...In one sense, your body is always that way, of course. But you've lost it forever.

* * *

[Editor's note: Jerre Mangione in *An Ethnic at Large* (New York, Putnam, 1978) summarizes the events to which the discussion below refers:

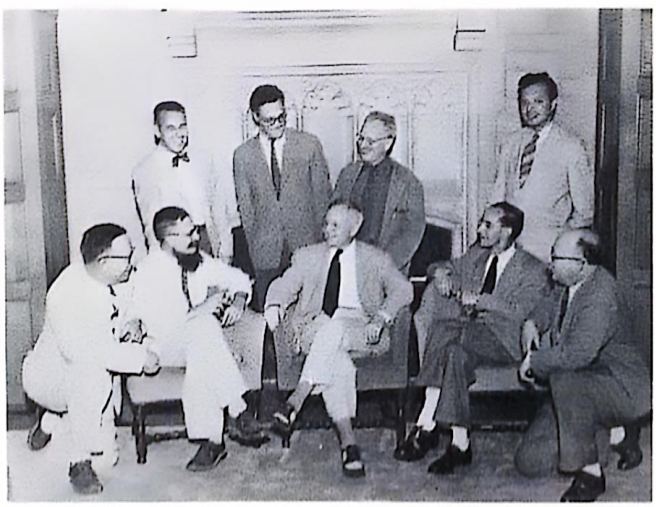
> At the first American Writers' Conference in 1935, Burke scandalized the orthodox Communists in the audience by proposing that all future left-wing propaganda substitute the word "people" for "masses." He argued that words like "masses," "workers," and "proletarians" tended to exclude some of the very elements in society that the Communists were trying to win over. At the end of his presentation, he acknowledged that his advice bore "the telltale stamp of my class, the petite bourgeoisie," but held that the allegiance of his class to the left-wing cause was "vitally important."
>
> For this view he was severely reprimanded in public by such Communist bigwigs as Mike Gold and Joseph Freeman, who gave elaborate Marxist reasons for rejecting the use of "people." Only two months later both men were obliged to swallow their rationales when the Comintern passed a resolution calling for a "People's Front," in which Communist parties in all countries were urged to ally themselves with as many liberals and bourgeois, petit and otherwise as possible.

Burke's paper "Revolutionary Symbolism In America" is collected in *American Writer's Conference* (New York, International Publishers, 1935). Malcolm Cowley has a chapter on the conference in *The Dream of the Golden Mountain, Remembering the Thirties* (New York, The Viking Press, 1980). Other sources are: "Thirty Years Later: Memories of the First American Writers' Conference," *The American Scholar* (Summer, 1966), a discussion with Burke, Cowley, Granville Hicks and William Phillips, moderated by Daniel Aaron. Aaron's *Writers' on the Left: Episodes in American Literary Communism* (New York, Harcourt, Brace and World, 1961) has a valuable discussion. Sidney Hook's review of Burke's *Attitudes toward History* appeared in the *Partisan Review* (December, 1937), and an exchange between Burke and Hook appeared in the following issue. Hook's comments are reprinted in William Rueckert's *Critical Responses to Kenneth Burke, 1924-1966* (Minneapolis, University of Minnesota Press, 1969.]

RS: Is it Joseph Freeman you described as "a locomotive in public and a nice guy in private"?
KB: Well it might have been Mike Gold too. They both went after me. Malcolm Cowley omitted some of the major details, so far as I was concerned. I thought it was a terrific experience. For instance I had the goddamdest fantasies after that thing, and I had been going through problems of my own besides. I really felt the ostracism. *I was out.* When I went out of that room after that thing was over, I walked behind two girls there and one of them said to the other, "But he seemed so honest!" I was just devastated, I felt that it was horrible. My god, the next day I walked down the hall I saw Joe coming, I shrank. And he says hello. You did those things. And the irony is when the slate came up, it was just as if nothing had happened.
RS: You were elevated to the committee.
KB: Yes. But in the meantime I had gone home, and it was ghastly. And I lay down. I had been out the night before; and I'd been shoved into this thing on top of that, and I lay down and I'd hear "Burke! Burke!" My own name had become a curse word. I'd wake up and finally, my god, just this side of an absolute hallucination: my tongue...shit dripping from my tongue. Horrible. My whole devotion to Harold Rosenberg stems from that time on. He turned up when I was lost. He thought it was funny! He took me down to a bunch of super, of sub sub-splinters of a splinter group. To take me into reality.

On the basis of it, I saw so damn much about the psychology of the trials. The irony was that when they turned up, I could understand how the prisoners felt. You feel so goddam...it's a world of its own. You felt that the whole place was against you. I saw something. Boy! And the irony of it in that whole damn business was then, of course, Sidney Hook thought I was just a sell-out to Stalin. I didn't believe the goddam charges against Stalin at the time. I really didn't. I thought the guy was straight.
FG: Uh-huh
KB: So he thought I was just a sell-out on that stuff.
FG: At what point did you realize Stalin was what he was?
KB: Later on...no, I didn't...
FG: After '35?
KB: Very much later. It was almost the time of...from what's-his-name? The guy that spilt the beans over here.
FG: You mean Eastman?
KB: No, no, the Rooshian, the current...what's his name. Kousevitsky?
FG: You don't mean Trotsky?
KB: No, no, not Trotsky...the official who spilt the whole thing on Stalin.
FG: You don't mean Solzhenitsyn. That's too late.
KB: Inside, the big guy in the business itself.
FG: What year is this, in the forties?
KB: It's the man who came over here, who sparred with Nixon.
FG: During the hearings in the early fifties?
KB: Who was the fella who ran the...who became the Prime...Premier, whatever you want to call him, the whole outfit, the head of the state.
RS: Khruschev? In '55 you're talking about?
KB: Yes.
RS: Until then you didn't think Stalin was exposed?
KB: Yes. I thought it was still...
FG: The evidence was there since the mid-30s.
KB: I had worked on the damn stuff. I just didn't think...I never thought...I made a complete distinction between left totalitarianism and the Hitlerite stuff. I didn't think that the left...it didn't go that way. I just didn't. *It didn't make sense to me.*
FG: Have you read Solzhenitsyn, *The Gulag?*
KB: I've only read pieces of it. I believe what these fellas are saying. I didn't this other stuff that they were handing out then.
FG: Did you think your good will was in any way used by this in your willingness to not see this distinction between Hitlerite totalitarianism, as you put it, and totalitarianism of the left?
KB: I don't know. Hook's attacks on me were based on the assumption that I was just a sell-out. I knew that.
FG: That you were actively involved in deceit. Was that what Hook was saying?
KB: Yes. What happened there was this. The whole attack of the Trotskyites at that time in New York... all of us on the fringes of the whole damn thing...There was a general tendency, *The New Republic* with Stalin and *The Nation* with Trotsky; there was always a little balance between them. I just wove along without having to say a lot about it.

When I wrote my *Attitudes toward History,* I built the whole thing on my formula, *the bureaucratization of the*



Staff of the Kenyon School of English, 1950.
From left: Philip B. Rice, William Empson, Arthur Mizener, Robert Lowell, John Crowe Ransom, Kenneth Burke, L.C. Knights, Delmore Schwartz, and Charles M. Coffin.



Caricatures made at the First American Writers Conference. William Gregor, Phil Wells and Russell Limbach. *New Masses*, May 7, 1935.



Squatter's Shacks in Central Park in the early 1930's. Photography by Nat Norman, Museum of the City of New York.

imaginative. Trotsky's attack on Stalin was sloganized as an attack against bureaucracy. My assumption was that if you had Trotsky, then you'd have a Trotsky bureaucracy. And that I don't doubt at all. There's no other way to run that sort of enterprise. Anything you know about Trotsky gives you reason to suppose that he would be as much of a slave-driver as Stalin ever was.

FG: He was far more *sophisticated* than Stalin.

KB: Much much more, but it's the same damn thing. If the situation demands such policies, you're going to get them. In Congress, one way to kill a measure is to propose that it be extended to benefit many other groups, too. You can kill it by making it so broad that it becomes unwieldy. Hook thought that I was universalizing the principle of bureaucracy in order to steal it from Trotsky as a special slogan against Stalin... whereas actually I think the way I analyzed the term and corresponding attitudes does apply it honestly in a universal way. There's that wonderful story I quote in my edition of *Attitudes* published by Hermes. I used to resent that I got it from Lincoln Steffens. But to make up a story as good as that and have it swiped without credit would have been pretty rough!

Steffens, as the story goes, was entering the New York Public Library when a friend of his came stumbling out. The man was obviously in great agitation. "I've found it!" he shouted. And he clamorously called for Steffens to go with him and listen while he told of his discovery.

Steffens obliged. The two bumped along Forty-Second Street and turned down Fifth Avenue while the friend somewhat incoherently explained.

Gradually, despite his excitement, his words bgan to make sense—and Steffens realized that his friend had found a plan for saving the world. And the more the outlines of the plan began to emerge, the better the scheme sounded.

Then Steffens became aware that someone was walking along beside them, listening to the account. And finally, turning, he saw a very distinguished-looking gentleman—then, looking again, he realized that it was the devil.

Steffens: "You seem to be interested in my friend's plan."
The Devil: "Decidedly!"
Steffens: "What do you think of it?"
The Devil: "I think it's an excellent plan."
Steffens: "You mean to say you think it would work?"
The Devil: "Oh, yes. It would certainly work."
Steffens: "But in that case, how about you? Wouldn't it put you out of a job?"
The Devil: "Not in the least. I'll organize it."

That's as great in its way as that wonderful thing I like so much from Veblen: Invention is the mother of necessity. I use that over and over. I love it as though it were the first time I heard it. It's the whole story!

FG: Can you connect bureaucracy with a theory of taxonomy.

KB: My formula: *bureaucratization of the imaginative* is that you start out with a dream, you organize it, and you're *necessarily* going to get something else. You're gong to get all kinds of unforeseen consequences. The thing builds up a nature of its own. You see, one of my basic laws in this regard is the *instrumentalist embarrassment*, or paradox, or quandary. I don't know what you call it, paradox? It's the embarrassment of instrumental thinking. That is, you assume that some policy, some instrument designed for a certain purpose, has only the nature that you use it for. That's a great mistake. Everything has a nature of its own. There are all these other potentialities that go along with it. There's your instrumentalist fallacy, or embarrassment, or paradox, or quandary. I still can't decide what noun to settle on.

The fundamental irony of the whole situation is this: You're anthropomorphizing, proclaiming that King Kilroy was here! But whatever you do, there's something else going on. And that's the scene of the whole show. And some of those unexpected consequences turn out quite well, but others decidedly do not. Of course the biggest ones to turn out lousy are our pollutions. We've built up a nature, but it's a counter-nature, in the sense that it has *unforeseen* consequences that not nature but only human ingenuity could bring about. Bucky Fuller sees it as irreversible, and he sees it as wonderful. I often see it as both irreversible and wonderful and [points thumb down].

FG: I'd like to turn to the relationship between purpose and motive, which is of course your distinction, and your pentad in general. How does it overlap with a strict linguistic poetics as you find in Jakobson and Barthes? If you were to map your pentad of linguistic force on top of structural linguistics, what would survive? Are there direct points between these two systems?

KB: I've never worked with Jakobson enough to make a decision on that. I don't really know. The terms themselves are *really questions rather than answers* and someone else might want to define the situation differently. All I say is, however you do define it, implict in the algebra of it, are certain ways in which the agent will react, will be motivated by the scene, and so on. And then the motivation will be of a different sort depending upon the scope, or circumference of one's terms, if the scene has a god. My analysis of the pentad was a way of sharpening up what's going on in a work that's already written.

FG: A hermeneutic tool, an interpretive tool?

KB: Yes. It makes me understand the musculature of the work. That's what you look for in a work. It tells me what's there. The theory of my pentad (or hexad) tells me what kinds of questions to ask of a work and by inspecting the work I enable it to give me the answers, not just by precept, but by example. If I look at a work: What's the scene/act ratio in there? You want this guy to love that one; well, all right, I'll look to see how the work proceeds to make you do that. I found this a good way of working with students. If they wanted to appreciate a work, I found such terms for motivation a good way to start asking about the work's style and structure, especially in the case of classical structure. For one can use classical structures as benchmarks without necessarily demanding that there be no departures from such structures.

FG: Do you anchor down the pentad with other points of epistemological inference such that it's not, to use your expression, "a terminological screen" unto itself but a screen compatible with other systems?

KB: Maybe I can do it. I was hearing a fellow on Cavett's show this morning, an anthropologist, McGuiness. He was talking about the Eskimo situation in Alaska. They are just about destroyed. They're drunk all the time, and they can't do a thing. He got caught in a little town where there were only two mechanics who could fix his car, and they were both stewed. The oil companies move in there, give them all money, and all they do with it is drink.

Theirs was originally a *survival* culture: They had to go out and get those whales. That's what they *had to do*. Now the whole *meaning* of such a livelihood is lost. There's a moral in that situation; in a survival culture you had to do things a certain way. Now people go out and run up and down the road to keep in good condition. But in primitive cultures the conditions keep the natives in good condition. They did what they *had* to do.

FG: Eskimos don't jog.

KB: Yes. You do philosophy. It's a *moral* act. But by god, if civilization were accurate, we'd do it *as a necessary act!* The fundamental question in this matter of counter-nature, it seems to be, is: How much of our culture is based on *physical* necessities? What happens to those necessities? The country was built on necessity. I had it as far back as *Permanence and Change*. It dealt with the rational and irrational, and I said the trouble with that way of lining things up is: A whole lot of things happen that don't fit either of the two categories. How about *methodical?* Your stomach! It has a *method* of digesting. A tremendous amount of culture is based on this methodical business of fitting into nature. How far does that go?

RS: This goes back to your program in *Counter-Statement*. What do you do in the face of over-production? That's never been dealt with. We just go through periodic crises. There's never been an introduction of any dramatistic critique of production.



Fulton Fish Market, general view. WPA Project, The Museum of the City of New York.

KB: And I think it's just quite possible that it is a bigger job than we can handle. I don't know. Because it does require so much ethics. There's too much ethics needed to run a state. If I have to go out and jog and stuff like that in order to keep from falling apart...

RS: Has there been anywhere where the introduction of ethics is a brake on production?

KB: Apparently in the Hawaiin culture, originally, they did a lot of it by simply swimming so much and enjoying the water: Fishing!

FG: Can we get back to the point of the exchangeability of systems where common points knit together to reproduce a reinforced episteme...a reinforced mode of knowing where one system overlaps the other to magnify it...and how your pentad fits into any system you wish to draw on, which is separate from it, even alien to it, but which *fits* it. If it's not structural linguistics, what is it?

For example, I see your work in Goffman skeletally, especially in the whole issue of ritual interaction: as one-to-one sequences of behavior, the idea of scenic change among strangers, relations to intimacy and how intimacy relates to ritual interaction. This all comes from your pentad.

KB: You see the original forumla I used, the medieval formula: *quis? quid? ubi? quibus auxiliis? cur? quo modo? quando?* is a hexameter line. Dick McKeon had not noticed that himself. If the terms are put in exactly that order, they make a line of verse in classical Latin prosody. I cheated in a way when I worked with it as a pentad, and I always think that I did it as a pentad because I had only five children. If I'd had six...

FG: If you'd had nine!

KB: Oh god! Eaneads, that goes back to...

FG: Pythagoras?

KB: No, the whole business that I worked on with that is...My "Dramatism" article in *The International Encyclopedia of Social Sciences* is classed under "Interactionism." I notice that Gregory [Bateson] didn't get in there.

FG: I don't see you as a social scientist. I see you as *more* than a social scientist.

KB: It's one field I do decidedly work with. *Permanence and Change* has a lot of sociology in it.

FG: But weren't you rebounding from a kind of naive Marxism in that book?

KB: You know what I was rebounding from? This is a drastic confession. You wouldn't believe this. There's an awful lot of that book that was really secularizing what I learned as a Christian Scientist. All this psychogenic illness stuff... there's no other secular book in the world where you find so much of that published at that time. I got that from Mary Baker G. Eddy, and I secularized it!

FG: That's a revelation. I would never have guessed that overlap.

KB: But the point I started with: *quis? quid? ubi?* etcetera ..."Who?" "What?" "By what means?"... the way I put them in the book originally: "what" was "act," "who" was "agent," "why" was "purpose"... I worked them all out that way. I had "by what means" for "agency," and I cheated in this way: If I say that "he did this," for example, "He built this with a hammer with alacrity, with good will," I've used "agency" in two ways, one literal, one figurative. I put "how" and "by what means" together; and what I did in making it a hexad was to make a difference between the two.

It really is an improvement. "How" is your *attitude*, and "by what means" is your *instrument*. I'll tell you the ultimate irony I found out. It was no wise crack in this five term business. I was writing that book *A Grammar of Motives*. The book had been accepted and was finished. I started teaching at Bennington, then I holed up in Andover for the winter.

All I had to do was verify a few references here and there. But I started *rewriting* it! Even to the extent of changing the order. There's no one order required for a book of that sort. I could even have arranged them alphabetically, an order I have used on other occasions. But if you do write them up in a given order, all sorts of internal readjustments turn up. I was out here for the winter. I had a high chair and to keep in trim, I put my typewriter on that, and wrote standing up. The two boys were playing on the floor around me. In some places the snow was up to the roof in drifts.

Then one day I discovered that I couldn't go on with the revising. (Incidentally I realized later that all this time I'd been standing on one foot, with my other hooked on a chair.) I'd gone through three terms; I had two left: "agency" and "purpose." But for the next step a whole new kind of problem turned up. There were *two* ways to go. If I went one of those ways, the style of the book turned into a "Dear Diary" sort of thing. And literally if I went that way, I felt as though things would dissolve into a sizzle, like an Alka Seltzer tablet. The feeling was intolerable. But if I went the other way it was as though my arms were bound tight to my sides, and that was equally intolerable. Both impressions were as near to hallucination as they could be without being so actually. They weren't just metaphors.

I stopped writing and started taking notes on my dreams. When writing these notes, of a sudden I remembered a letter in which I had referred to my children as my "five terms." And that was the problem. I had begun transforming those abstract terms into personalities. If I went more fully in that direction, the book would turn into a sizzle. But if I kept them as abstract as the original plan of the book demanded, I'd be as bound as if in a straight-jacket.

For instance, I had originally begun with "Act." In the revised version, I shifted that to third. And my third daughter was the stage-struck one. Thus the tendency toward the personalizing of the terms had begun to make claims as far back as that. But when I got to "Agency," for my fourth section, this shift began to manifest itself intensely.

My elder sun, Butchie, was the ideal person for that term. He's the great instrumentalist, exceptionally competent when dealing with machinery, where I'm at my worst. This fits Emerson's idea of "compensation." In our family, he's the great gadgeteer. We all rely on his ability as a fixer. When he was a little kid, he designed a whole plumbing system for this house before we had any such facilities. It was a marvel of economic efficiency. The water would come from the old pump out there in the yard, go through the heating system, the kitchen and the bathroom, and be drained off through a pipe that went back into the cistern that it had been pumped out of.

FG: It sounds like Rube Goldberg.

KB: That's real efficiency for you! And the instrumentalist term, "Agency," was pressing to become Butchie in a big way, with everything becoming a fizzle if it did, and a straight-jacket if it didn't. As soon as I discovered what I was up against, I knew what I had to cancel and redirect—and why. Stanley Hyman had come to town, and he was staging a two-day drunk party in New York. I went, stayed up all night drinking and talking. I would talk to anyone as long as he would stand it, then I'd talk to another. When I came home, I was talked out. While leaving the terms in their "personal" order, I could now otherwise give them their proper abstractness, and the pattern is better with "how," *quo modo*, as attitude.

FG: It serves the laws of symmetry?

KB: Oh yes, but the point I started to tell you: In this article on "Dramatism," I'm talking about my notion of this antithetical element, what I call "congregation by segregation." You get together by all being against the same thing: It's us against them. You find that every system has one of these twists in there somewhere. It's not necessarily that one, but there's always the temptation for that one to get in. In the Christian system, Jesus is the victim. Here the issue is technology, where everything is positive, free, and supposedly good. We find that the victim is the country itself, the nation.

FG: The soil.

KB: Fifty thousand dump heaps now. Victimage is coming back on us now. It's the most efficiently victimizing system that was ever built!

FG: The role of the victim is placed in the future.

KB: You get your freedom, though. Everyone of these guys who made millions is for freedom, while victimizing the



Live Sheep in Penn RR Yard—Pier 78. WPA Project, The Museum of the City of New York.



Shelter on the Waterfront, Coenties Slip, Pier 5, East River, Manhattan, May 13, 1938. Photograph by Berenice Abbott. Federal Art Project "Changing New York" Museum of the City of New York.

structure. I get around to a notion like this: Abolitionism is a falsity. If my theory is correct, I can only believe in transformations. The whole issue gets down now to a distinction between implicit and explicit: an institution that is explicit over in one culture (thinking in terms of comparative cultures) is implicit in another culture, or vice versa. In other words, you ask yourself how some previous system is transformed. In older systems you had your scapegoat actually, formally expressed, explicitly there. In this system it isn't named at all, yet you have the biggest scapegoat mechanism in history. Here is the straight, assertive, do-as-you-will system, and here is the greatest victimage principle, but it is moved over into the victimizing of the economy itself.

FG: There were many forewarnings of this. We can't say we weren't warned.

KB: Right. I have to start on this basis: I'm defining us as the symbol-using animal, and I'm saying the resources of symbolism have always been the same. You can get them transformed, not eliminated. Marx said, at the time of the bourgeois revolution, you weren't abolishing slavery; you were getting *wage* slavery. You *transformed* slavery, you didn't abolish it.

When a culture marked by a more primitive technology confronts a civilization marked by a high development of technology, the more primitive one (like the Eskimos in Alaska) collapses rather than undergoing transformations.

FG: Could we discuss why they couldn't transform it? Is that linguistic?

KB: That's a big feature of it. But as the fellow on the Cavett show said, it's a survival culture in the strictest sense. You give them some money, and money destroys them. It wasn't a money culture at all; it was a survival culture.

FG: But why does money necessarily destroy them? Why couldn't the culture assert itself in such a way that something that wasn't it could destroy it? If they had no history with money, how was it allowed to enter? Clearly we're talking about something above the culture.

KB: If you don't go out and hunt those whales as necessity, then you *should* do it like jogging. Money makes it ethical as an "ought," while before it was ethical as a "must." There are two kinds of ethics involved. The word means custom. But there are two kinds of customs. One means that you've *got* to do it, the other means that you *ought* to do it. That's a big difference. And the more strain you put on the "ought" kind of ethics, the tougher things are. The more of the culture that just grows out of the necessity of living, the better off you are. It just takes too much conscientiousness to make an adjustment of that sort.

FG: The Eskimo culture never though in terms of sheer survival. Sheer survival was always granted. It was an assumption that was central within the culture.

KB: They didn't have to see it in terms of anything. As this fellow said, they have 37 words for snow but no word for love. They got along all right without it.

FG: Love *in* the snow, perhaps. On the way here we were talking a little bit about you and Charles Peirce, his trinity-like structure versus your pentad, the five and the three, or as you say now your hexad, the six and the three. How do you draw your five, or six, from Peirce's three? Are you familiar with his terms for conceiving the world as a continuity? Can you place this in reference to your scene/act ratio? The physical universe displays an undetermined variety and spontaneity for Peirce initially.

KB: Well, the fundamental notion I have... the way I cut all the corners of my whole pedantic hexadic process is this: I cut all down to these three things: You've got *equations* (this equals that); you've got *implications* (if this, then that); you've got *transformations* (from this, to that). Give me language and I can show you; for instance, if you say *inside* it implies *outside.* If you say *up* it implies *down.* If I say, "God our Father" there's my equation. If I say *inside*, my *implication.*

FG: Equations, implications, and transformations. I got it. Pierce drags in the concept of love into his three, he does. Love is an element in the triple.

KB: Well, love is in my scheme; love is a personalized word for communication.

FG: Not a generalized?

KB: There's communion in love, shared communion. That's all there is to it.

FG: There is a shared dynamic which is the necessary ground for all meaningful activity, for all perception of continuity in the world. You need love, you need the presence of love, as an active dynamic more than the communion of shared selves.

KB: Desire, if you want to make it a nice word. You need some kind of principle of desire. Spinoza says "it is of the essence of man *to desire.*" You go after something. Actually, the irony of it is the beauty of it. That's why the world is all good. You see, the world is good because the good is that at which you aim. (That's Aristotle.) You're after something, and so is every thing else in the world. Therefore, the rattlesnake has a different idea than you have of good. He thinks it's good to take a shot at you. You may think it's good to take a shot at him. But each of you is aiming at the good. Therefore, good, love, purpose, all the same thing.

[We have purposes as *physiological* organisms, and purposes as *symbol-using* animals. We feel hunger as physiological organisms. But our ways with symbol-systems are such that in order to feed, we're much more likely to seek for money wherewith to buy the food than to go directly in search of game. And the indirect route via money engages a realm of obligations and trick appetites far afield from the "natural" routes to food gathering. And our books, all of them themselves far afield from such a direct route between hunger and physiological satiety, allow for such roundabout ways as are reflected in the various philosophic nomenclatures I attempt to characterize in my *Grammar of Motives.* That's what I meant by talk of putting one term for motives in, turning the crank, and out comes another.]

Sure, sure, sure. Love would be your nice word for purpose. That's all you need. Chance, love and logic. I'm after something; I rationalize; then luck is whether I hit it or not. That'll fit. That's all you need. It fits into the scheme and maybe I can work *with* it.

FG: Both Fogarty and Hyman compare you to Richards? I always wondered how you felt about that comparison.

KB: That's all right. I give Richards credit as far back as my *Permanence and Change*, I got good stuff from Richards, and I said so.

FG: *Theory of Literary Criticism?*

KB: Yes. That was a good book.

FG: What do you make of *The Meaning of Meaning?*

KB: I got the most out of the supplement by Malinowski. I found that much more useful for my purposes than any of the rest. I've been plugging it for years. For some reason they won't give Malinowski credit for that text. I don't know why

people were so against him. I never followed that. I find it one of the most suggestive essays I ever read. Even the very things he left out are there in a way.

His whole way of bringing out the texture of language as mere part of a wider act: That is, not symbolism in the sense of this being the word for that, but when you're using symbols as *part of a sheerly physical operation,* as when you're teaching a kid how to tie his shoes.

He talked about the use of language when the illiterate tribesmen were catching fish, and how they called back and forth to one another. The anecdote seems better and better the more closely you look at it. It's more resonant than he had the slightest intention of making it. Fishers of men, fishers of fish, and the initials, in Greek, for "Jesus Christ God Son Savior" spelling in Greek *ichthus,* the fish. Of course that's out of bounds but anyway:

Here they are, catching fish, completely cooperative, working together in a plot *against* their victims. Then on the way back the tribesmen have a race. They have several boats, and these *collaborators* turn their trip back into a *competition.*

Then when they get back they start telling about it. Here language turns to an out and out narrative. And that moves into the whole business of phatic communion. Whereat you can glimpse how the prowess of speech can develop as sheer art, like all great poetry taking delight in language for its own sake. The text also touches upon the commemorative aspect of language, that is, designs on mummies and such. All these anecdotes are explicitly distinguished from the kind of context involved in a book, which defines its own context. These others don't have the formal structure that a book has.

He's just about got in there the whole range of the relationships between language and non-linguistic motion. The kind of speech used in the first anecdote involves primitive signs: Everything has got to be what you call it with regard to the names for the instruments they're using and the distinctions that are given. It's a primitively *scientific* aspect of language. There is the narrative sort; then a ritualistic language around corpses and urns, little magical signs. But although Malinowski says that the written book is formally self-contained, his own account of such symbolic action gives us ground to suppose that it's only *relatively* self-contained. No text can be wholly self-contained. That's where the deconstructionist guys are cutting in, on that sort of thing. I want to stop halfway there. Destroy it, yes, if you will. But first let us see it as having the form it does have with its particular kind of beginning, middle, and end.

RS: You had already begun to think about social context and language in *Counter-Statement,* for example when you demonstrate in your analysis of *Hamlet* how form can be understood as "the psychology of the audience." I'm interested in the pre-figurative movement of *Counter-Statement* and how that is the foundation of your work.

KB: Some students who have worked on my stuff in general have commented on how much of it is already there in germ in *Counter-Statement.* I started from poetry and drama whereas most of such speculation starts from questions of truth and falsity, problems of knowledge. I started with other words for beauty. The first word I threw out was beauty; but I have my equivalents, involving strategies designed to induce cooperation. The big change in my life was when I wrote those two essays, "Psychology and Form," and "The Poetic Process" in *Counter-Statement.* I intended to round things out with a third, "Beauty and the Sublime," but that fell through, and I've been racing around ever since. You'll find little bits of it in *The Philosophy of Literary Form,* but it never got fully developed. In some respects it involved a quarrel with Kant. Consider his *Critique of Judgment.* There is no indication that he ever read either Aristotle's *Poetics* or his *Rhetoric.* Instead he saw in terms of an "aesthetic," strongly *pictorial* in its emphasis, in contrast with Aristotle's stress upon *action.* His whole system is a *dramatistic* mode of analysis. His formula for God was "pure act," which of course, Aquinas could take over. God as technical equivalent is what it all adds up to.

I claim that the line I got from Aristotle complicates my relation to the Kantian tradition, which builds around not action, but understanding. Aristotle's system was *ontological,* a theory of *being (being* as an act). Kant's was *epistemological,* rooted in a problem of *knowledge.* That's where I get my distinction between a "dramatistic" and a "scientistic" approach to thoughts on the human condition. And what I call the *historical* heresy, or fallacy, is to see us purely as products of the particular historical period in which we happen to have lived. I have to see us as transforming a universal identity.

FG: So there is continuity of being?

KB: Yes, if we are the symbol-using animal, then I assume that there are certain permanent relations between bodies and symbol systems. The idiom is the same.

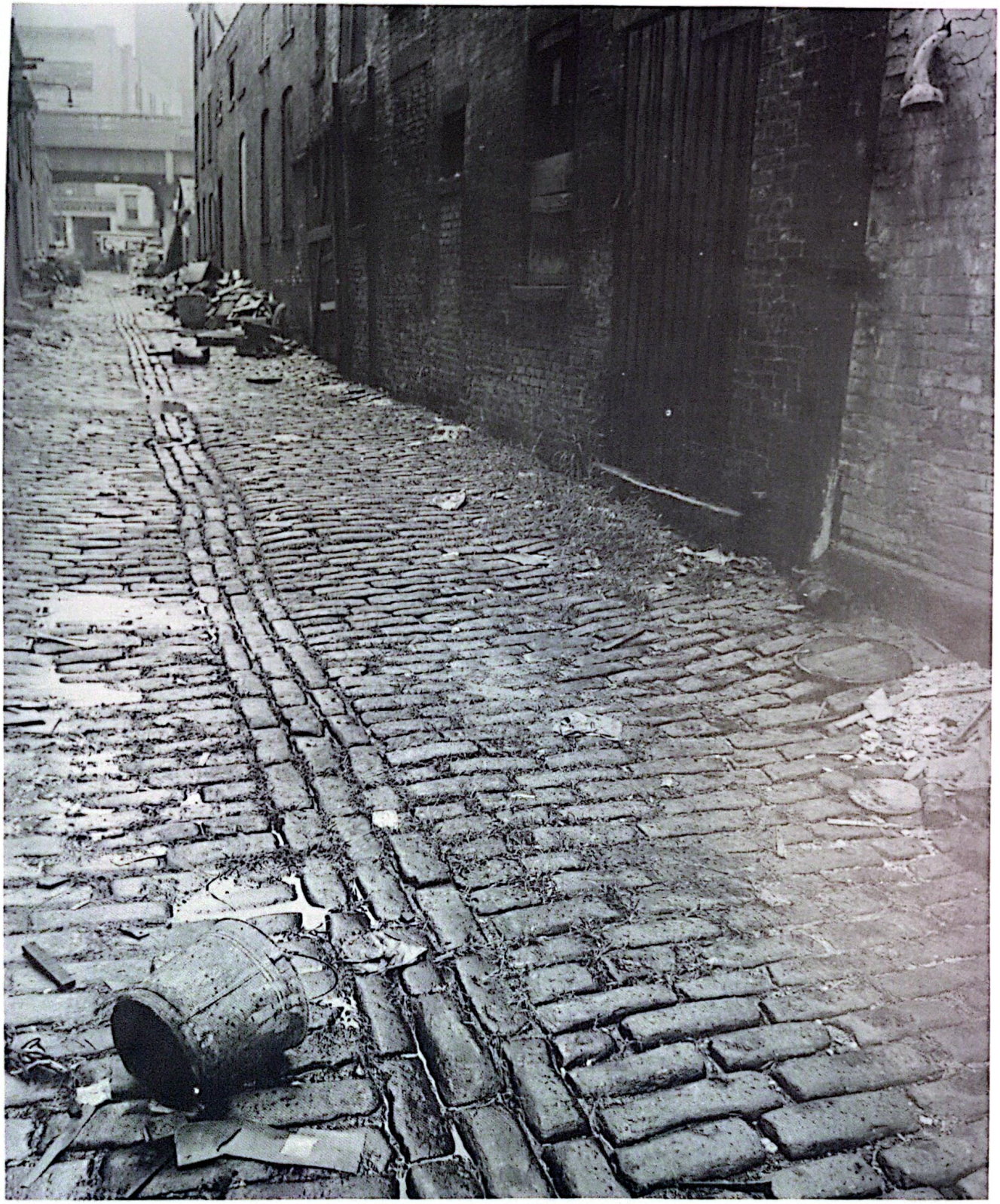
FG: How do you distinguish being from knowing? How is knowing, when it's argued to be prior to being, independent of being?

KB: There are lots of subtler systems. I don't even bring up knowing. I just take it for granted.

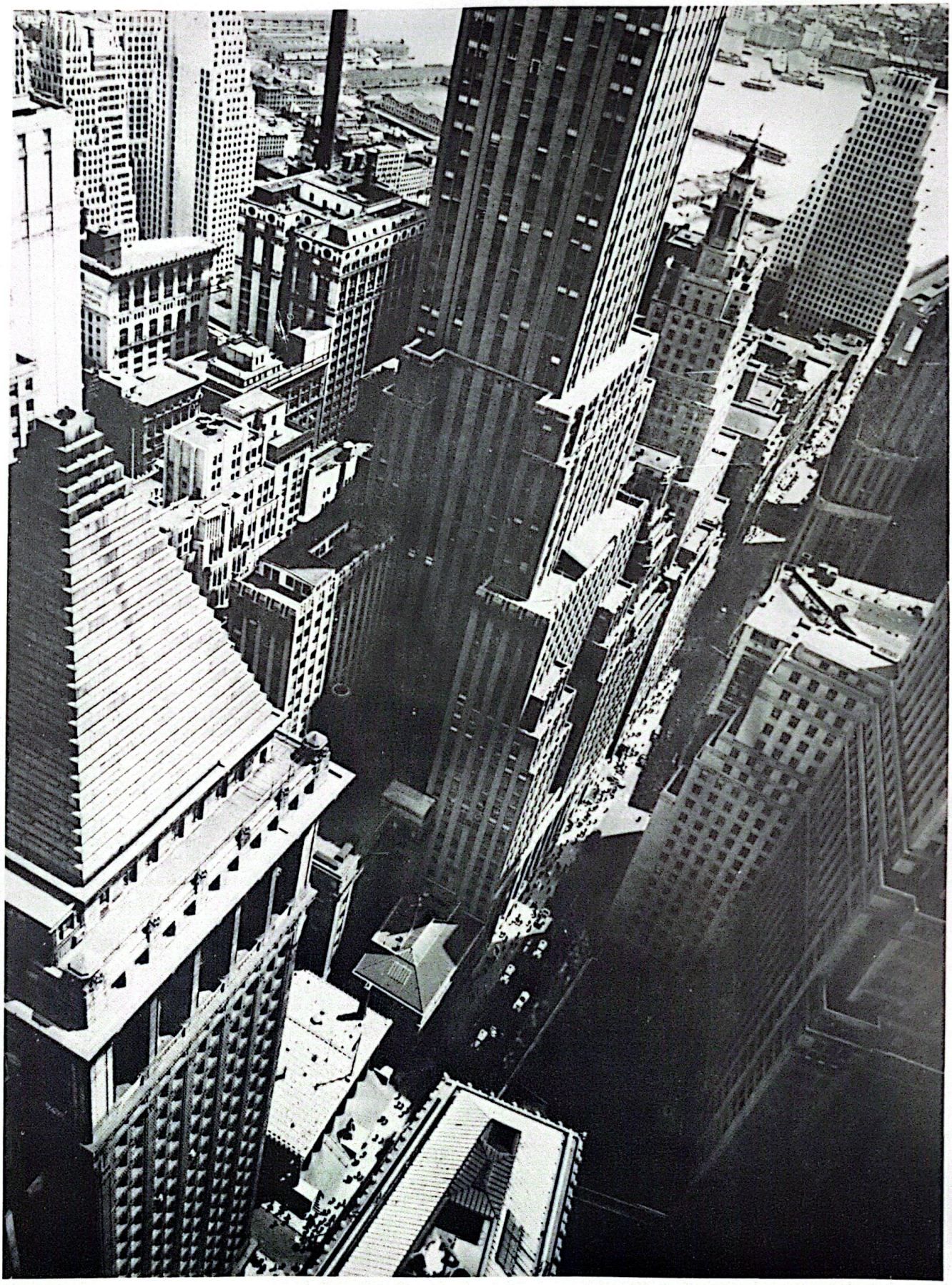
[I botched the answer there disastrously. In the first place, on going back over my *Permanence and Change* to write an epilogue for the new edition that U. of Cal. Press is publishing, I came to realize how much Kant is operating there. After all, Nietzsche is an offshoot of Kant, and the middle section of the book is wholly in that groove. The knowing-and-being issue figures this way: My investment in the negative led me to distinguish between "propositional" and "hortatory" kinds. The first, the scientistic (knowledge) kind: is/is not — the second, the dramatistic kind: do/do not. The dramatistic route to knowledge is thus: (a) one acts; (b) in acting, one encounters the *resistance to one's purpose; (c) one learns* by suffering the punishment dealt by such resistances. There is a sheerly *sensory* ("aesthetic") route to knowledge, as when one happens to touch something that is hot, and one "instinctively" withdraws the hand. Kant's first *Critique* features the is/is not negative of *science* (a realm of "sensation" and "understanding"). The second *Critique* (his *ethics)* properly features the do/do not negative ("ideas of reason"), along with a stylistic strategy whereby his "categorical imperative" presents the don't-be-unjust in the accents of do-be-just. The third *Critique* involves a twist whereby he goes from the "Aesthetic" in the sense of the *physiological sensory* to the "Aesthetic" in the sense of *artistic.* Sensation is not purpose; it's purveying information that will help a given organism behave as to carry out *its* "purpose" (or "drive"). But that's a practical ("utilitarian") function. "Pure" art ("The Aesthetic" to perfection) is *antithetical* to the "practical." So Kant's *epistemological* (as vs. the Aristotelian Poetic's *ontological* approach to these matters) ends us with the formula for the



"Theoline" pier #11 or 12, East River at the foot of Wall Street, (Downtown Skyport seen through ship's ropes). April 9, 1935. Photograph by Berenice Abbott. Federal Art Project "Changing New York" Museum of the City of New York.



Charles Lane between West and Washington Streets, September 20, 1938. Photograph by Berenice Abbott. Federal Art Project "Changing New York" Museum of the City of New York.



Wall Street showing East River Photograph by Berenice Abbott. Federal Art Project "Changing New York"
Museum of the City of New York.



Herald Square, July 16, 1936. Photograph by Berenice Abbott. Federal Art Project "Changing New York" Museum of the City of New York.

artistically aesthetic: "purposiveness without purpose." And that could add up to: *Artistic* sensations for their own sake. And that's far from the ways of Aristotle on the *poetics* of *imitation*. And at least *I* don't have to tell you how Kantian epistemology *culminates* in "non-objective" art. *History* has *proved* it.]

KB: I've never read Kuhn's book on scientific paradigms. He is stressing more the *particular* scientific structure, not the *general* orientation that *Permanence and Change* builds around.

FG: In fact, he used paradigm very strictly himself. He warns against less than strict use, a more symbolic interpretation of the concept of paradigm.

KB: My concept of orientation would be a symbolic paradigm in that sense. The whole background.

FG: Kuhn would agree. The paradigm for Kuhn is what the ideas are drawn from, not the idea itself; what grounds the logos.

PD: Science is much different, though. You have a specific paradigm.

FG: It's evidential. There's a body of evidence that corresponds.

PD: Your notion of orientation is almost like Gramsci's notion of hegemony. Things by which we live, proverbs, the way you see my body, all kinds of things built into your expectations.

KB: That's it. I just slapped this word in there. First I used orientation, then ideology. I began to ask myself what did I have in mind? Just anything: superstition, prejudices, hopes ...completely unformed. You're really talking about nothing specific. It certainly is a quality X you're discussing. It's something like the topics in Aristotle's *Rhetoric*. He's talking about certain specific judgments. His theory of topics amounts to what, in modern sociology, you'd call values. That is, he tells you what to say if you want someone to like someone, or to form a policy, what to say if you want someone to dislike someone or be against a policy. The things he's telling you to say are the things that represent the kinds of things people think are good and bad, desirable or undesirable, the promissory and the admonitory, in that particular society. But his terms are so highly generalized that they would apply to other systems. He's not telling what the *particulars* are. He's using a level of generalization whereby you could analyze symbolism in general. For instance, Aristotle might say that "a good reputation" is one component of happiness. But that would be true of all societies. But societies would differ as to just what *is* a good reputation. Sociologists could get insight into "values" when reading the *Rhetoric* from that point of view.

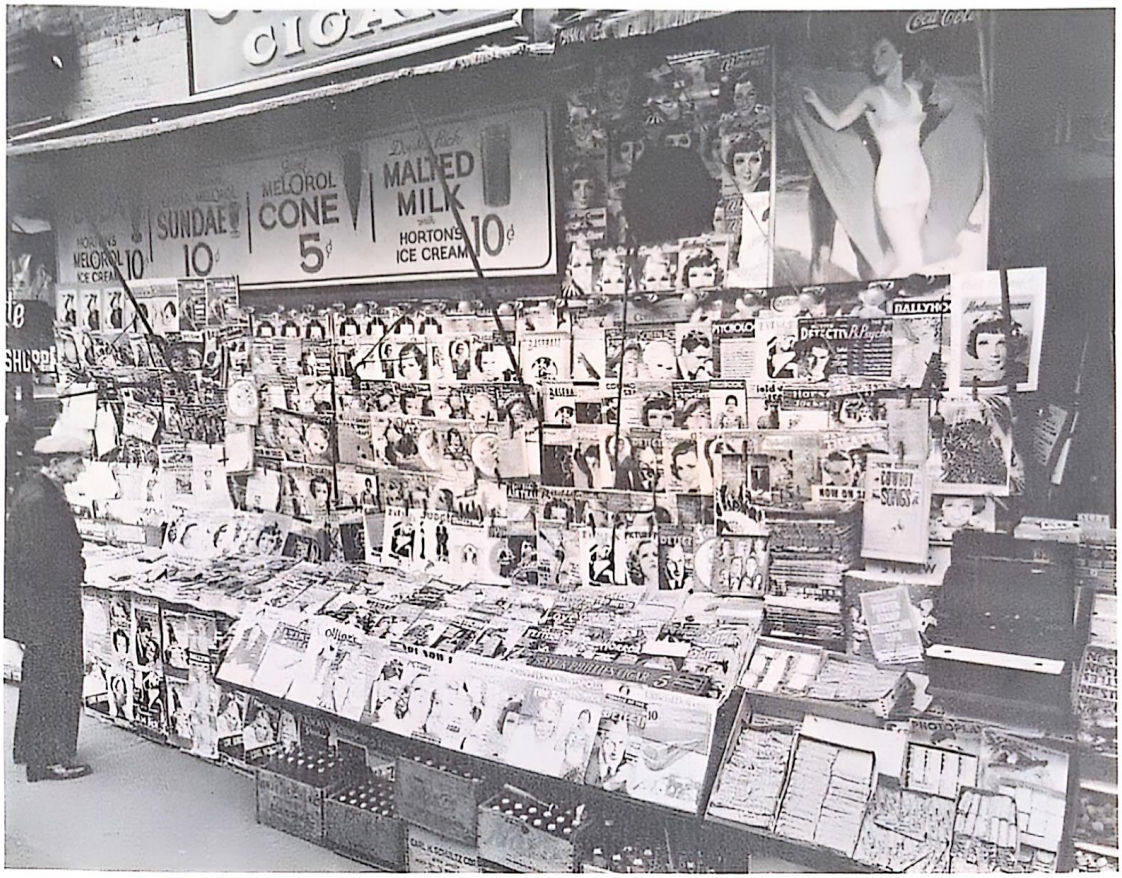
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PD: I'm interested in the whole situation of dependency of the child and how language is generated from dependency, and how tied to Augustine's view of things it is.

KB: I finally got my formula down to the basic statement of the case: Bodies that learn language. I claim this statement is everything you need to explain human motives, human relations: Bodies that learn language.

FG: You use the verb *learn* as key?

KB: Yes, you start in infancy, you see, in speechlessness.



Newsstand, 32nd Street and 3rd Avenue, Nov. 19, 1935. Photography by Berenice Abbott. Federal Art Project "Changing New York" Museum of the City of New York.

You learn speech in two maximum conditions of infancy arising out of speechlessness, *infancy literally*, and maximum immaturity. The whole nature of word magic comes from learning it then. That gives me three *loci* of motives: motives as supplied by the body, motives that come in language, and motives that come in learning language. But the fourth locus comes from the development of tools that language makes possible.

MD: Robinson Crusoe proved that he was human not when he started transforming the island, but when he started keeping his diary.

KB: The diary is a form of communication, not just an attitude to self. The fundamental thing is that language sharpens the attention making it more likely that, when you have invented something you'll recognize what you have done. And language is the kind of medium that enables you to tell others what you have done. Everything from then on we can deduce from these four loci of motives, the fourth becoming the realm of highly developed technology, which is building the man-made realm of counter-nature, with its attendant realm of pollution.

MD: There are two imaginations of that speechlessness: one is the moving, bumping confusion with no names for anything. And the other, Suzanne Langer did a lot with it, says that before speech things are too particular. Everything is concrete. Everything is so bursting with *quiditas* we can't think. So that words give us not particularity but generalization.

KB: I work out two aspects of speech. One I call the objective triad (the thing, its image, and the word for it). The other I call the contextual triad (situations, processes, relationships) which fits in with the Spinozistic critique of substance as treated in his *Ethics*. A substance having been defined as "that which is conceived by itself," he says there is no such individual entity. You can't conceive of a single thing by itself. The only thing you can conceive of by itself is everything. I salute that passage in T.S. Eliot's doctoral thesis where he says that objects only exist when you have language. It's quoted on p.61 of my *Language as Symbolic Action*. I think the issue of what you want to call that, the thing Langer is talking about, is obviously the stage where the things just fit as part of the environment.

MD: They haven't been outlined by a name?

KB: Take representative painting. There you realize that the painting *is* the name. For example, a Vermeer: a little bit of white coming through a window, a table and a chair. The whole thing *is* the equivalent of the image of the name. You feel that so much in Vermeer, that the *whole* thing is it! It's not just a picture of one thing, but the whole thing is *the* thing. So *that* painting has something of the quality of the Spinozistic, which might be the equivalent of what Langer is talking about. I touch on the matter in my articles on Bateson. His notion of the "unit of survival" has very good features in it because it does bring out the importance of the environment. But I argue that this kind of unit is the individual body. The environment is needed, but the body...

FG: Bateson includes the loop.

KB: I use a distinction from a book by Charles A. Perry: *Towards a Dimensional Realism*. The distinction is between "a part of" and "apart from," which I think is absolutely astonishing. It's a little shift between something being a part *of* something and apart *from* something. I work with



Union Square, July 16, 1936. Photography by Berenice Abbott. Federal Art Project "Changing New York" Museum of the City of New York.

my notion of the body as the principle of individuation. At parturition, you become separate. You're a part *of* the situation, but apart *from* it in the sense that your pleasures and your pains are immediately yours and no one else's. Immediate sensation is unique. Each individual body has this quality: The difference between *feeling* your own pain, and *being sorry* for somebody else's pain.

FG: That's the relationship between sense and empathy.

KB: That's an *immediate* distinction. Whether it's my bellyache or your bellyache. That's an *absolute* distinction dividing you from me. I secularize Aquinas' principle of individuation. You see, he takes it that *matter* is the principle of individuation, and my equivalent of "matter" is "motion". I'm saying that the body *as a body* is just in the realm of motion, and the motions of that body are such, the centrality of its nervous system is such as to make such pleasures and pains one's own and nobody else's.

MD: But it's a principle you trembled on the edge of violating or transcending. I was looking at the end of *A Rhetoric of Motives* where you talk about a state of "all the nerves attitudinally glowing...the state of radical passivity and incipience at which there is no inhibition." You say just before that a kind of knowledge that comes from a mystic perception is as much a kind of knowledge as the taste of a new fruit. Why do so many of those transcendencies involve a sense of *loss of individuation*? Isn't that just the point where my bellyache and your bellyache begin to blur? All those descriptions you glean from William James' talk about a sense of loss of border...

KB: Well, you've got two principles all the way through. Begin, say, with "private property." On a purely physiological level, "private property" is my stake as against your stake. If I own X amount of stock, that's private property in the other sense, the symbolic sense. Because of language you learn all your identity as a social animal, family relationships and so on. You get all kinds. I remember that line when we were kids in school, swiped from Yale:

> Bala Boola Bala Boola
> Bala Boola Bala Boola
> On to Victory, On to Victory
> For God and Country
> And Pittsburgh High.

Three great identifications! I'm a very strict orthodox theologian. I agree with St. Paul: "Faith comes from hearing." You can't have religious doctrine unless somebody tells it to you. Theology is a function of language. If you want to say that a worm is feeling wonderful, is in heaven already, go ahead. If you want to call that heaven, okay, but it couldn't have a doctrine. It couldn't have a word for God, it could only be with God. I think it all fits together pretty well. I met Maritain once. I was asking him about a speculation of mine based on Sherrington's notion that the body is really under a bunch of controls, so therefore, in the ultimate sense, you are really fighting yourself all the time. Then I thought it would be possible if you had this sheer *attitude* rather than actually moving about by controls. Then all could go on all at once on that level. That might account for this sense of unity. Often it *does* seem like a basic physiological feeling. I suggested that the mystic's sense of unity might operate on that bodily level. But Maritain said, "Maybe *Protestant* mystics!" That was a good wisecrack.



Ferry: West 23rd Street, December 23, 1935. Photograph by Berenice Abbott. Federal Art Project "Changing New York" Museum of the City of New York.

FG: Chomsky's people would argue you're not learning language, but that the organ of language is merely growing, like all your other organs.

KB: Well, the organ may be growing.

FG: Clearly the organ must grow in a context that nurtures the "organ." It's not learning in Piaget's sense.

KB: My whole distinction is...this is the way I handle consciousness and mind. I make a distinction of this sort in my haggling with the behaviorists. (I go along with them so much that I have to make a basic distinction between their notions and mine.) I have to make an absolute distinction between non-symbolic motion and symbolic action. They treat the two realms simply as a difference in degree and not in kind. They want to throw out consciousness. I deal with consciousness this way: All the time, even in the world of inanimate nature, just physical nature, you have things making discriminations. Water is liquid unless the temperature changes. Below 32° it becomes a solid, ice. At the upper end, it becomes gas, steam. Nature herself makes these discriminations. At this moment, in our bodies every little cell is discriminating after its biological fashion. But we're unconscious of all that. We're even unconscious of how we're conscious. Discriminations are going on all the time. We're 99-plus% unconscious. But mind is the genetically endowed ability, the physiologically endowed ability, to learn an arbitrary conventional symbol system such as a "natural" language. I call that mind. Animals don't have that, so far as we know. In that sense, Helen Keller had a "mind," even if she hadn't had a chance to crack the code by realizing that her helper's pressure on her hand under water was *spelling the word* "water." When she got that idea, a whole world opened up for her. *She got the idea.* She had a marvelous mind to begin with. But sensory privations such as she had can prevent such developments. A person so deprived can become a wolf child. And after a certain number of years one can't learn a language even if one didn't have her sensory privations.

FG: So mind in that sense is linked with the organism? The physiology of the organism.

KB: I give a definition that mind is the ability to learn a language, then the development...

FG: But that ability is only emergent at a certain stage in the organism's development. At another stage it would not emerge. So it's not independent of the organism...

KB: You learn language when you have such limited resources. For instance, when an infant first starts to learn a language, it can do about three things: It can suck, it can cry, and it can thrash around. It only does those three things.

FG: It's all you need.

KB: But later on you've got lots of things to do. These animals in Skinner's boxes learn because they have so few things they can do. If a human animal is adult enough to have a lot of things it can do, it can't learn language. Language is an astoundingly ingenious medium. But the infant can begin learning it because it is still so stupid. It itself paces the job.

RS: Do you distinguish stages in the formative ground of symbolic action, and how then do you locate them in relation to the acquisition of language? For some, the psychoanalytic model suggests how. Lacan, for example, distin-

guishes the pre-linguistic, pre-Oedipal stage (when the child is one with the mother's body) from an intermediary stage, which he calls the mirror stage. This occurs when the child, upon seeing its reflection in a mirror for the first time, anticipates on an imaginary plane the mastery of its bodily image. This experience is the threshold of the child's entry into the Symbolic order which comes with the acquisition of language and which Lacan associates with "the name of the father" ("nom du pere") punning on name and no. Language, then, carries within itself repression: the father's prohibition of the child's desire for the mother.

KB: From the standpoint of the thing Lacan is talking about, that distinction (the whole mother-father business), I have to put all that on the symbolic side. Our first parents are not representative cases. They didn't need a papa or mama that are born of woman. They were so good at language from the start, God gave Adam a big taxonomic job to do. So Genesis doesn't give us a representative case to build on, so far as the learning of language is concerned. But on the other hand, God said "Let there be..." and there was! The creative word! In the Old Testament, God creates with the word. The irony is what Augustine does when he takes over the Old Testament. He turns it into a trinity; the Spirit was over the water, and God the Father created with the Word, which in the New Testament is Christ, the Son.

RS: The Bible enforces the father's prohibition, although the figure of Mary in the Christian tradition argues for possible re-entry of the mother as primary. Remaining within the perspectives of a psychoanalytic model, is it possible to locate, as D.W. Winnicott does, a stage in symbolic development when the child-mother boundary may determine a less repressive ground for symbolic action?

KB: [Winnicott brings up too much from another angle. My impression of him (from the standpoint of my reading of Bowlby on the child's relation to the Mother) involved a problem of this sort: (I don't have it here, but I wrote something to Murry Schwartz along this line): It seems to me that Winnicott's scheme would make the child too much a Momma's boy. There is a kind of *dissociation* needed when the child grows up. I cited Shakespeare's *Coriolanus,* whose whole prowess as a warrior is undone because of his obedience to Momma. The enemy who kills him calls him a "boy of tears." An early story of mine, "In Quest of Olympus," does happen to touch on that. It tells about a little guy who becomes a Giant by felling a tree. I analyzed it, years after, as the ritual slaying of a *maternal* tree. But I'm not too sure. However, I do feel that it does deal with a problem of "growing up" which Winnicott didn't strike me as having a place for. Yet I hadn't read enough of him to be clear about that either.]

FG: This would be in keeping with your point about the paradoxical value and necessity of the double bind, that a certain amount of logical jamming is necessary in acquiring the ability to maneuver at all in the social world.

KB: Yes, when I look back at my own story, my first problem wasn't killing the father, it was killing the mother! There's my story of the guy cutting down a tree, killing the tree; the tree is a mother symbol. I began by interpreting it as killing of the father. But my mother kept me in curls. It was my father who rebelled for me. (Ironically, I fared fairly well with *bobbed* hair, because Buster Brown had bobbed hair — and some time I was called "Buster," who wasn't a sissy.)

PD: You're talking about shattering the primary structures of narcissism which are determined by the relationship to the mother.

KB: Oh yes. But I didn't think from what I read of Winnicott that he brought out the necessary *making* of a *division.* For instance, to me this is the great beauty of Baudelaire's poem "La Geante," that poem of crawling over a woman as a giantess, like a mountain. The genius of the poem is in its way of confusing the distinction between maternal woman and erotic woman. I don't know exactly how women handle that matter; but men *have* to make a dissociation there. They can not just go on with their mama. And I've never seen an indication in what I've read of Winnicott that he talks about how you've got to deal with that. When I analyze my own story, I got the tentative notion that that's what my symbolism was about. When I was writing *Permanence and Change,* all of a sudden the word schema turned up. I came home one day, in a sudden state of certainty. I was usually insecure in all kinds of things. I had a big cup that I always drank out of for milk not alky. This day I came home saying, "my life is going to be altogether different!" — whereupon I picked up my big cup, dropped it on the floor, and smashed it, obviously a "Freudian" incident. That night I was awakened by a dream in which I was saying, "Ma- ma- the broken sche-ma is mine-a." I had noticed that I had begun using the word "schema" in my book — and I called my mother "Ma." (Later, when I was working on my *Grammar of Motives,* I liked to call it my *Gramma* of Motives.)

PD: Joyce called a manifesto a mamafesta.

KB: I must keep starting over again with these basic *empirical* distinctions: non-symbolic motion, symbolic action, and the centrality of the body's nervous system as the principle of individuation. Originally I thought the magic entered when the infant, by its cries, produced mama and hence there arises the "creative" word. But I think it's a little subtler than that. Actually, to influence people with words is not magical. I mean, to use words to influence people who understand words involves a kind of *realism!* The magic comes in when you start using words to change natural processes that don't understand words, and thereby in effect personalize the whole universe.

FG: In John, the word was made flesh, releasing the whole metaphor of language as a genetic structure: which is implied in that enigmatic statement. The structural correlations between letters making words, words making sentences, sentences making sense. Chromosomes and genes making characteristics, characteristics combining to make personalities, which utter sentences. The fact that in most western languages you have 24, 22, 23 letters to establish your basic word sense, and in genes you have essentially *what* amounts to 23 pairs, a similar combinatory system at work generating words and phrases.

KB: There's a big difference between genes and the symbol analogy. That is, genes give you tropisms and language gives you tropes. Tropisms are conservative, and symbols change all the time. The critical difference about the human animal's kind of communication, language, is its notable influence in making possible the high development of tools, technology.

FG: What's the difference between tools and language? Is counter-nature only linguistic?

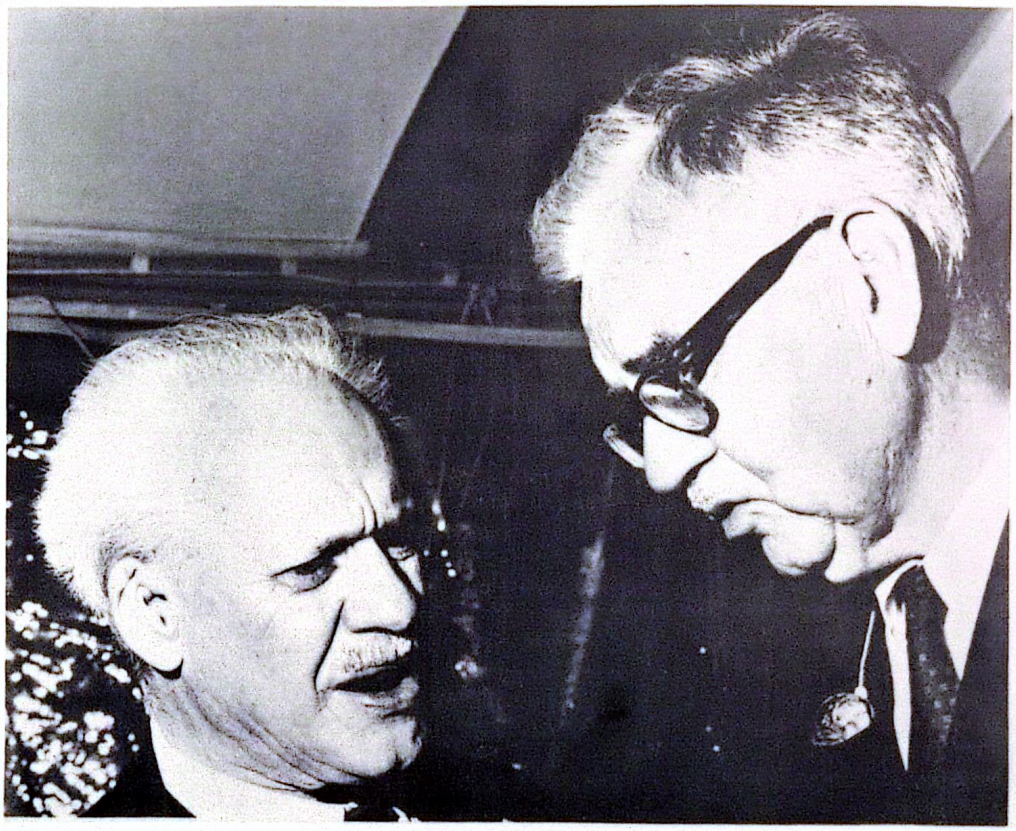
KB: Linguistic in the sense Gadamer brings out. The difference between tools and language is: You can lay a tool



With a Buster Brown haircut.



Author of *Permanence and Change*, 1935.



At the American Academy of Arts and Letters with Malcolm Cowley.

down, but you can't lay language down. In other words, your idea and the word for it are a little bit different, but they are all...

FG: The closer metaphoric approach or distortion would be program. Language is like a program not as much a tool.

KB: Yes, you can call anything tools, but the point is you've got that one big distinction, that a hammer you can lay down, but you can't lay down the idea that that's a hammer.

FG: Can you entertain the possibility that we could invest our language in machines so that if we disappear our language would evolve through these machines?

KB: Remember that wonderful twist of Samuel Butler's in the book of the machines in *Erewhon*?

FG: Yes, but I don't think Samuel Butler ever encountered an IBM 360.

FG: It's amusing. People were very indignant when he showed how just as plants used bees to do their copulation for them, so machines use humans. Add that one process, *reproduction,* which so far machines haven't been able to supply for themselves. What do you want to call that? The symbolic introduces the necessary impregnating process. The more I look at language, the more it strikes me as being as astounding as existence itself. This whole process of the change when you go from mere animal sounds, to this particular kind of symbol system. But anyhow, here's the point: once you start from the standpoint of changing the world, then counter-nature is seen as a new kind of living condition. It began the first time language helped in the production and spread of some positive instrument. To those who want to call us *homo faber* rather than *homo sapiens,* I would say: *homo faber* would never have got very far without the role that symbolism performs in the job. It takes an interaction between the two. It takes a new metaphor to suggest a new technological process. And the outcome of the innovation suggests another metaphor. My great day was: 3/9/81! That was my breakthrough.

FG: Say that again?

(whereupon the text says: GONG)

KB: I love odd numbers: 3/9/81. The "breakthrough" occurred the ninth day of last March, during my time at the Winter Session, Graduate Institute of the Liberal Arts, Emory U. The breakthrough concerns an anecdote in my article, "Definition of Man," (*Language as Symbolic Action*). I quote:

> I witnessed the behavior of a wren that was unquestionably a genius within the terms of its species. The parents had succeeded in getting all of a brood off the nest except one particularly stubborn or backward fellow who still remained for a couple of days after the others had flown. Despite all kinds of threats and cajolery, he still lingered, demanding and getting the rations which all concerned seemed to consider his rightful lot. Then came the moment of genius. One of the parent wrens came to the nest with a morsel of food. But instead of simply giving it to the noisy youngster, the parent bird held it at a distance. The fledgling in the nest kept stretching its neck out farther and farther with its beak gaping until, of a sudden, instead of merely putting the morsel of food into the bird's mouth, the parent wren clamped its beak shut on the young one's lower mandible, and with a slight jerk caused the youngster, with his outstretched neck, to lose balance and tumble out of the nest.

I had often told this story, which I used as a way of indicating the kind of attention and communication that language makes possible, and thereby makes possible the discovery and spread of new methods, in brief that made possible the gradual accumulation of inventions we call "technology." I doubt whether that wren was aware enough of that motion as an innovation (a *new method*) to ever do it again. And even if it did, the secret would die with it; for it lacked the kind of communicative medium that could hand on the necessary information.

Yet I was never satisfied with the story, and I became still less so. At best it was but one incident, and I couldn't even be absolutely sure that I had seen it. Just *one* report of an animal making an invention (in this case, instead of leaving it for the baby wren to determine the moment of flight from the nest, resorting to a "revolutionary" change that introduced what an engineer would call a "principle of leverage," a highly "sophisticated" innovation). Yet just one such incident to build on.

Then on 3/9/81 I suddenly realized that the reports of animal experimentors, the most scientific of observers, had been testifying to thousands of cases in which nonhuman animals, when subjected to laboratory conditions that, while differing greatly from the state of nature to which they are instinctively adapted, improvise wholly different ways of gathering food. And their confinement in such laboratories makes it possible for their behavior to be inspected as regularly and methodically as my chance observation most decidedly was not.

We have been repeatedly told, for instance, how a chimpanzee, when subjected to an environment so different from its natural conditions of livelihood as to merit what Logology my style would call "Counter-Nature," yet soon learns to so invent new ways of behavior that, by experimenting with the resources available there, it discovers (that is to say *invents*) a way of so pressing a button that it gets a piece of banana. And the Behaviorist "Skinner Box" has provided ample documentation to show how, by learning to take advantage of wholly new "unnatural" connections between the goads of hunger and the attaining of food, animals can invent modes of behavior that, in their state of nature, they wouldn't even "think of" doing, even if they were crazy.

But they are not at home in the kind of medium that enables them to pass on the relevant info to one another. But for all their inventiveness, they can't analyze it, the nature of the technology that replaces their modes of livelihood in the uncontrolled state of nature.

Language is the particular medium of attention, expression, and communication that makes the inventions and accumulations of technology possible — and, as things look now, irreversibly inevitable, since even the correcting of technology's abuses can be brought about only by further technological inventions.

And that brings us to an Eschatological Conclusion. Whereas the Marxist Eschatology says that in a highly developed Technological civilization the history (dialectic) of class struggle will abolish itself by leading inevitably to the classless society, all that Logology my style can conceive of is maximum development of Technologically "perfected" Counter-Nature, unless (as is not inconceivable) the whole thing blows itself up.

* * *

ADDENDUM: EDISON AND FRIENDS

KB: We developed ways of protecting inventions by patent rights, and then you get around to the time of Edison: *He invented inventing.* He had a factory where every day he tried to invent something else!

FG: You know what stopped him? Rubber! Rubber stopped Edison. He tried to produce a synthetic rubber, and he spent his fortune on it and never produced any.

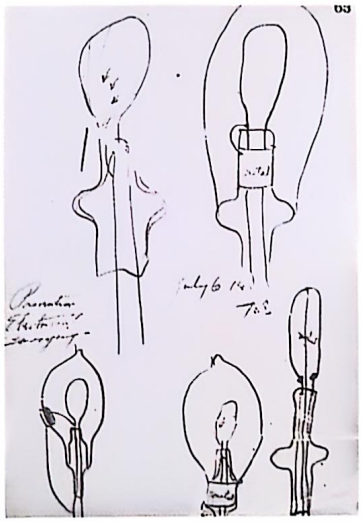
KB: The irony was that Firestone *found it out by accident.* He threw some latex and sulphur on a fire, and by God he had it! He had his tires. Firestone had the necessary kind of attention, and he mopped up beautifully on that. By his vulcanizing process he made good tires; you didn't have sufficiently hard rubber before.

FG: Edison was obsessed with omniscience, *his own:* hence the meta-status of inventing inventing. Given the mechanism of his process, he thought anything could be invented. He was stopped by rubber. There's a moral there.

KB: But I never will forget one of the greatest moments of my life when I was a kid. My grandmother and grandfather were staying for a few weeks during the summer in a hotel at Bemis Point on Lake Chautauqua. *There were lights in the trees* between the hotel and the lake. Oh God, lights in the trees at night. They couldn't have been much in the way of brightness. Probably sixteen candle power? But to me they were magic. It was another world. I'll never forget that. I was living one year in Brooklyn Heights, opposite Manhattan. Being a poor sleeper, I can remember in the middle of the night looking out: the whole thing blazing! All the way up and down, thousands and thousands of lights, and that's got to go!

FG: It will not go. It may go elsewhere, but not in Manhattan. The jewel will shine brighter and brighter. The great towers of finance are lit more than ever.

KB: I just thought it was the end of the world. I really had that sense. It was magic. There's no doubt about it: that much light! The whole symbolization of light: It's there, no question about it. Lucifer!

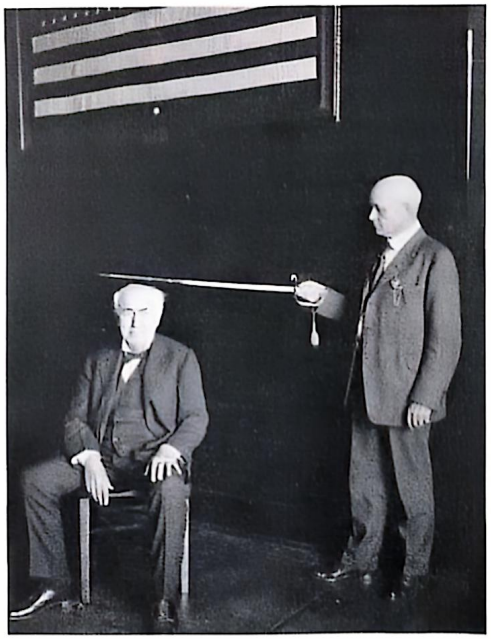


from Edison's notebooks.



Inventing invention: young Edison's laboratory.

Photographs courtesy of U.S. Department of Interior, National Park Service, Edison National Historic Site.

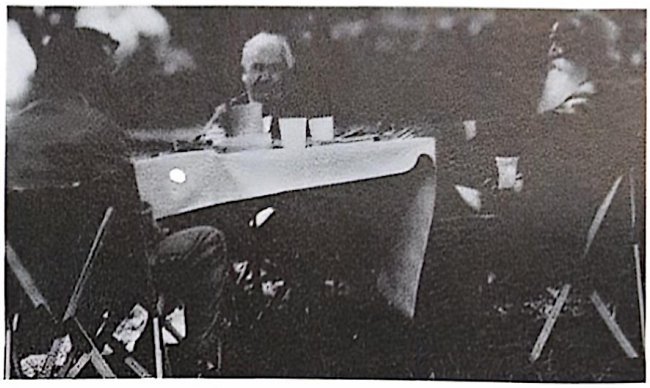


Edison knighted.



The last frontier: rubber.

Edison experimented with ragweed.



from "In Nature's Laboratory" (1916).

"Living it Over Again"
A Chronicle of the Trip

Toward the end of August,'16
A six, a Ford, and a truck between,
Left Orange, New Jersey, to hit the trail
That follows Dame Nature o'er hill and dale.

From workshop and tests Mr. Edison 'rose,
Firestone joined for a friendly pose;
An army of camera-fiends hovers near,
As we climb aboard with "Our Engineer."

A day or two brings us to Wood Chuck Lodge
Where the wild birds sing and wild grass nods,
And the Dean-of-the-Outdoors greets with glee
The travel-stained pilgrims to Roxbury.

The month draws on to September's dawn
And we cosily camp on Grandmother's lawn,
And should the sun presume to scorch
We read in the shade of the old home's porch.

At Corinth next our camp is pitched,
To the stately pines our tents are hitched;
From time to time we gather 'round
To learn what our Naturalist Dean has found.

Then from the pines thru deep'ning woods,
We take our way, we take our goods
To Babcock's place at Indian Lake
Some bully good pictures here to take

Of Messrs. Burroughs and Edison
Taking turns at each other's medicine!
Had camera combined with dictaphone,
We'd tell much more than these pictures alone.

On the 2nd we make Elizabethtown
By the Lake that mirrors Blue Mountain's crown.
A cosy hostelry nestles between—
Electrically lighted—first one seen!

We bid adieu to Sharow's farm,
Its camp-fire groups, its peace and calm,
And on our purring caravan works,
To camp again by Ausable Forks!

How well the day's drew out their length,
How well Dame Nature plied us strength!
To us a-gypsying by the river—
The plausible, saucyful Ausable River!

Man moves (like disc of graphophone),
So we move on to reach Malone,
But stop, a-berrying by the way,
Like barefoot boys of an older day.

Sometimes by roadside we may chat,
Discussing statesmen—what they're at!
The world politic—swapping hunches—
But mainly waiting 'round for lunches.

Thus Plattsburg hove in view at last,
On Behan farm our camp's made fast.
We visit oft the Plattsburg fair
To see the good things displayed there.

To Chazy Landing the ferry brings
Our cars, our tents, our hosts of things;
To Rutland, next, in old Vermont,
We may continue on our jaunt.

Near Arlington, of verse and fame
We pitch our camp in Bronson's name,
And spend a restful, quiet hour
In storing up some mental power.

The eighth arrives, Lenox is reached,
Where "Next to Godliness" is preached;
At Rev. Allen's Hylands ranch,
'Tis here we find our pathways branch.

We say "good-bye" and press the hand
That's found such wonders in our land,
Enhancing small things with comment
That made our play of some moment.

How well we fared we show in print,
With those whose service showed no stint,
And pose with Johns, Lee, Endicott,
Williams, Ott—you're not forgot!

The ninth—we're back in Orange town
Where brawn and brains to work go down!
So may these simple lines remind
Of pleasant days now left behind.



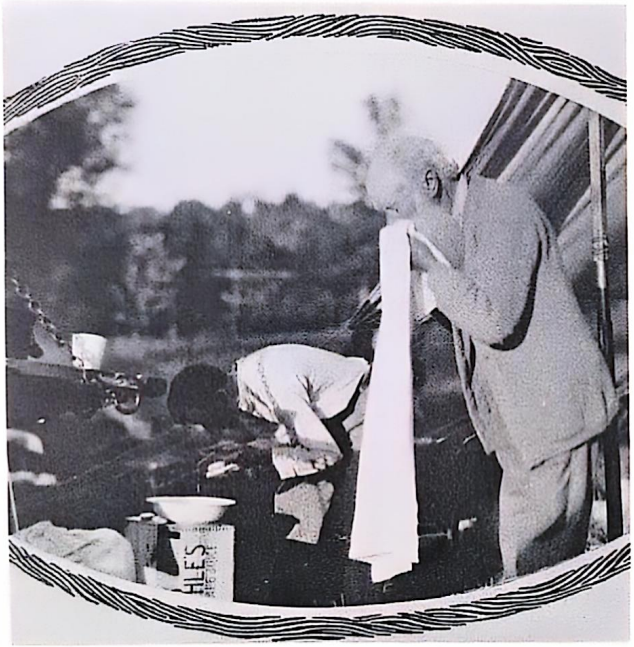
Getting closer to Nature: Burroughs and Edison.

One Sunday in 1863, during a ramble in the Washington woods, Whitman fell in with John Burroughs, a farm-boy from the Catskills who was working as a guard in the Treasury building, while his great interest was natural history, and who had come to the capital really to be near him... Burroughs sometimes joined Walt on his hospital rounds, or sat and talked with him on the capitol steps... Burroughs knew more than anyone else of the birds and wild life of the District...

More than once Burroughs gave Walt Whitman observations that he used in poems,—for instance, the poem that was called *The Dalliance of the Eagles,*—and Whitman at Riverby, in 1878, and later, jotted down notes of his own that suggested Burroughs. He picked his currants and raspberries for breakfast, and, sitting at the open bay-window, he watched Burroughs ploughing and grafting trees... Together they listened to the meadow-lark and looked for the early wild flowers, as Whitman presently recalled in *Specimen Days,* visiting a waterfall, deep in the woods, a greenish-tawny stream that plunged over broken rocks amid shaggy old trees.

—Van Wyck Brooks, *The Times of Melville and Whitman*

* * *



Early morning at Camp Tuckahoe, Burroughs, Firestone washing.

West Park, N.Y.
Dec. 11, 1916.

My dear Edison and Firestone:

That was a fine trip you gave us. John Muir would have called it a glorious trip. You arranged the weather just right and you begot in all of us the true holiday spirit. We were out on a lark and our spirits soared and sang like larks most of the time. My health had been so precarious during the summer that I feared I could not stand more than two or three days of the journey, but as it turned out the farther I went the farther I wanted to go. I drank in health and strength every hour. The doctors think that as we grow old there is great remedial power in mechanical vibrations. I think the vibrations of a motor car over the good state roads on a trip to the Adirondacks with such a company in it as we had, beats all other appliances. But the vibrations or convulsions set up in the diaphragm by the stories around the campfire at night beat even that, or at least supplement it in a most effective way. I do not know which I owe the most to—the campfires or the car. I am only sure that I took a most delightful shaking up—such as I had not had for 40 years. It is true that it does not take much to make one laugh on such occasion; he is in the jocose spirit—and a little humor goes a good way. We see life at an unaccustomed angle and the droll side of it strikes us with unaccustomed force.

Well, I say *a la Muir* we had a glorious trip. We cut the heart out of the Adirondacks and we took a big slice off the Green Mountains. I had never before seen the Adirondacks under such favorable conditions. Seen as we saw them lined up in a great procession, they are very impressive. They take the conceit out of my native Catskills. Their vast geologic age awes one, holding their heads so high after a hundred or more million of years, and their magnitude and primordial look—all stir the imagination. In them we beheld the source of much of the land out of which you and I came. They are the mother of vast areas of stratified rock in the lower part of the state. Here I saw the source of the vast sand and gravel and clay banks of the lower Hudson. When Edison gets his foundry perfected for extracting potash on a commercial scale out of the granite rocks, what an inexhaustible supply the Adirondacks will afford him. In one of your pictures where Edison and I are half hidden in the grass, he has his hands full of disintegrated granite and is pointing out to me and naming the different mineral elements it contains and telling me of their various uses. The feldspar is the source of the potash which he hopes to obtain on a scale that will make us independent of the Germans for this mineral.

It was a great pleasure to see Edison relax and turn vagabond so easily, sleeping in his clothes, curling up at lunch time on a blanket under a tree and dropping off to sleep like a baby, getting up to replenish the camp-fire at daylight or before, making his toilet at the creek or wayside pool, and more than that to see him practice what he preaches about our excessive eating and at each meal taking only a little toast and a cup of hot milk. The luxuries of our "Waldorf-Astoria" on Wheels that followed us everywhere, had little attraction for Mr.Edison. One cold night you remember he hit on a new way of folding his blankets; he made them interlock so and so, then got into them, "made one revolution" and the thing was done. Do you remember with what boyish delight he would throw up his arms when we suddenly came upon some particularly striking view? I have to laugh when I think of the incident of the big car two girls were driving down a wet slippery street in Saranac and which when the driver put on the brakes suddenly changed ends and stopped leaving the amazed girls looking up the street instead of down. "Organized matter" remarked Mr.Edison, "sometimes behaves in a very strange manner".

Such a trip is a very sane and hygienic way of spending a brief vacation, especially if you keep clear of houses and hotels as we did and have so well organized an expedition as we had. The thought of it and the joy of it and the good of it stays with one for many a day.

Gratefully yours,

John Burroughs



The Triumvirate: Burroughs, Edison, and Firestone.

ON HORROR AND ABJECTION

AN INTERVIEW WITH JULIA KRISTEVA

William Margolis interviewed Julia Kristeva in Paris in March, 1981. The basis of the interview is her most recently published book: *Pouvoirs de l'horreur* (Editions du Seuil, Paris, 1980).

WM: Let's start with the idea of circumcision. You write that circumcision is the sign of separation of the son from the mother. In Hebrew and the Bible the word for circumcision is *moel* and *immoel*. There are two places in the Bible where circumcision of the heart is spoken of, and it is always in the imperative: circumcise your hearts! How do you understand circumcision as ritual and as separation from the mother?

JK: I think one can find very different explanations of this ritual, and I know the rabbinical tradition has several. I retained those you mention first of all for the simple reason that they seem true and secondly, because they correspond to the general movement of the book, the idea of which is to show that the symbolic function is in fact a covenant with a divine authority for the Jews of the Old Testament. This covenant cannot be made and cannot function without a separation from a substance which perhaps can be called nature or mother (one could give it other names), but it must take place. In the eyes of those who practice the ritual of circumcision it is the inscription of a covenant with God, and when one circumcises a Jewish child and pronounces the word *kodesh*, I think this is what is meant. Henceforth the child is inscribed in the symbolic community of the Jews in a sacred covenant with God. But what is interesting to consider is that this inscription is made on the body itself, and as such, it seems to me to repeat another cutting which is the cutting of the umbilical cord. But this repetition doesn't imply that the same thing is produced. No, there is a separation from the mother's body made by the cutting of the umbilical cord. To repeat the separation means that one recalls the physical cut, but in the act of repeating, it is displaced, producing something different, a cutting that is at the same time a separation from nature and a symbolic signification. It is not only a separation from the mother but also a displacement.

WM: A displacement. But Abraham was not circumcised until God demanded that he do it so that he could have a child. He was more than 100 years old, and his wife was 99 before she could bear a child. He also circumcised his entire community. That is difficult for me to understand. Circumcision is also one of the most ancient rituals. If one goes further back, beyond Jewish history, in the more ancient past which is lost, do you think circumcision still represents only the separation of the son from the mother?

JK: No, as I say, there are several possible interpretations, and separation is performed most basically by the cutting of the umbilical cord. But the fact that the cut is inscribed by another cut in the body of the child has many meanings. One could say that one takes a part of the child so that he does not remain complete in himself. A human being, thus circumcised, could say in some way: "I do not know everything. There is always something lacking, and it is this lack which makes me what I am in relation to God and which makes me search for completeness on the symbolic level." However, in relation to the feminine and corporality, circumcision also has a meaning which consists in a separation from the body, which says you are not only a body, you also have a relation to a symbolic other. You are not only born from a woman's body, you break with her and with corporality, in as much as a woman represents corporality, nature and substance. One can go further in this interpretation: not only does circumcision separate the child from the maternal body symbolically, but since this is inscribed in the body it functions to inscribe, it is feminity in the very body of man. It says in effect: "You also have the capacity to bleed, to be subject to rules, and to be in a certain sense the bride of God." Thus it is a custom with very ambiguous meanings, and it is this ambiguity of the ritual that I wanted to emphasize.

WM: So circumcision is a symbol of the feminine?

JK: Yes, that too.

WM: And clitoral circumcision?

JK: You see it lies between the two: the feminine and the paternal, the corporal and the symbolic, and it is this ridge from the beginning of which a human being continually and incessantly oscillates in both senses, from nature to culture, from man to woman.

WM: How do you interpret clitoral circumcision?

JK: It is a kind of symbolic incision which is inflicted on a woman's sex to signify "castration" some would say. Others would say that it is done in order to extricate her from nature and place her in relation to a symbolic quest.

WM: It's interesting that certain orthodox Jewish sects speak of circumcision in exactly the same way as Bedouins, for example, speak of clitoral circumcision. It is to diminish sexual sensation, to diminish sexual pleasure. Do you think this could be linked with the very distant past when bands of monkeys were in the process of becoming a human society, 400,000 years ago. Don't you think it could simply represent a physical means for diminishing sexuality?

JK: I don't believe in bands of monkeys who simply evolve and then suddenly have the idea of cutting sexual organs. If they have this idea, it's because they are no longer monkeys. I think this is a practice that is part of an already highly symbolic and highly organized society.

WM: I didn't mean to suggest that the monkeys invented circumcision, but that man, in order to maintain society, began to practice it. I mean to imply the mutilation is even greater.

JK: Then for you circumcision in some way complies with a hygienic rationale?

WM: Hygienic and psychic in order to diminish...

JK: Yes, why not. That's also a possible interpretation, though I consider it a bit too medical. It's a little like the kind of reason one gives for, I don't know, social security.

WM: Yes.

JK: But that is perhaps the purpose of the institution of the symbolic order; in other words, a kind of encoding of social harmony. But it is important to understand that it is not only

based on the diminution of violence but that this diminution of violence is correlative to the symbolic function. I think that in all sacrifice, murder, or even in the case of privation as here, it is not to be understood as an act in itself with merely physiological results, but it is the reverse or the doubleness of the symbolic purpose.

WM: But why that? That's what is remarkable.

JK: Because it is on the sexual level, and the relation between the sexual and the symbolic is always immediate.

WM: Clitoral circumcision is also symbolic?

JK: Yes, and also sexual.

WM: Yes, I know, but why?

JK: Why would you say that the Jewish people have not maintained the practice of other kinds of markings, cuttings, or tatooings?

WM: No, that I can easily understand. I see it in the situation of certain tribes who are now dying out. I don't know if it's a function of learning to read, which is interesting to consider, or beginning a relationship to a divine book like the Koran or the Bible, or perhaps simply an evolution in time.

JK: I don't think it's necessary to ground the significance of Jewish circumcision in a comparative anthropology. Rather, I think it must be situated in a history of symbolic forms and, in particular, in the appearance of monotheism. Obviously many tribes could perform rituals of this kind because human beings are tormented by sexuality and the symbolic, and by necessity they find similar gestures to signify this torment. But in the history of the Jewish people there is, nevertheless, this formidable invention of monotheism, which includes a celebration of the symbolic act concentrated in one God: God who is there and who speaks to you. There aren't several. There is only one. So the physiological correlate of this election, of this one God, is necessarily the election of the male sex, of the penis as representative here below of divine uniqueness. Then little by little every other form of sacrifice was done away with. Different plants, animals, etc. will no longer be sacrificed, even if eventually these rituals may accompany other Jewish celebrations. The ritual which replaces sacrifice will be this ambiguous cut: circumcision, as I just defined it.

WM: And clitoral circumcision?

JK: It's hard to speak of it in general. One must take each particular custom.

WM: Yes, but you just said one must not use a comparative anthropology.

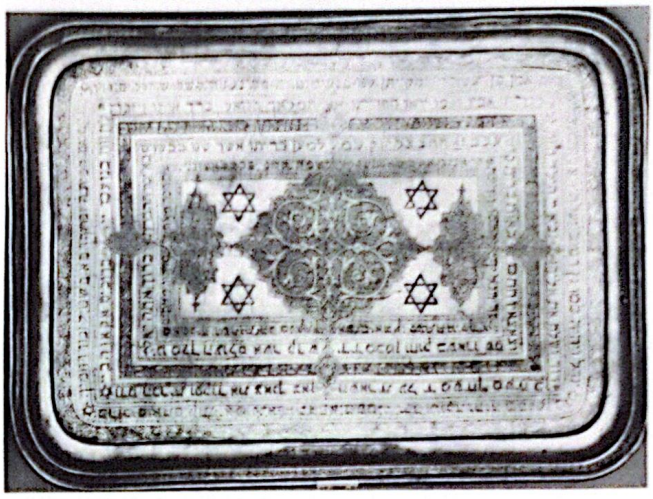
JK: I meant that one must not use a comparative anthropology in the void, because we weren't speaking of specific tribes. We were speaking generally, and that's what I don't want to do. Thus to explain clitoral circumcision, one must consider the practice in the context of that tribe's religion. But let us say roughly that clitoral circumcision necessarily means castration of woman and the intention of depriving her of a certain substantial, matriarchal power and of inscribing her in an order where she is dependent, where she is not whole, as Lacan would say. She is also lacking something, and from then on she will want to learn how to submit herself to symbolic laws and enter into an initiation.

WM: Yes, but...

JK: She must lose something.

WM: I no longer understand the reason why another tribe circumcises their children can be different from the reason why the Jews circumcise their children, and yet the two rituals can symbolize two completely different things.

JK: Not completely different, but in large part. Let us say that in every case it will signify this: I take from you something



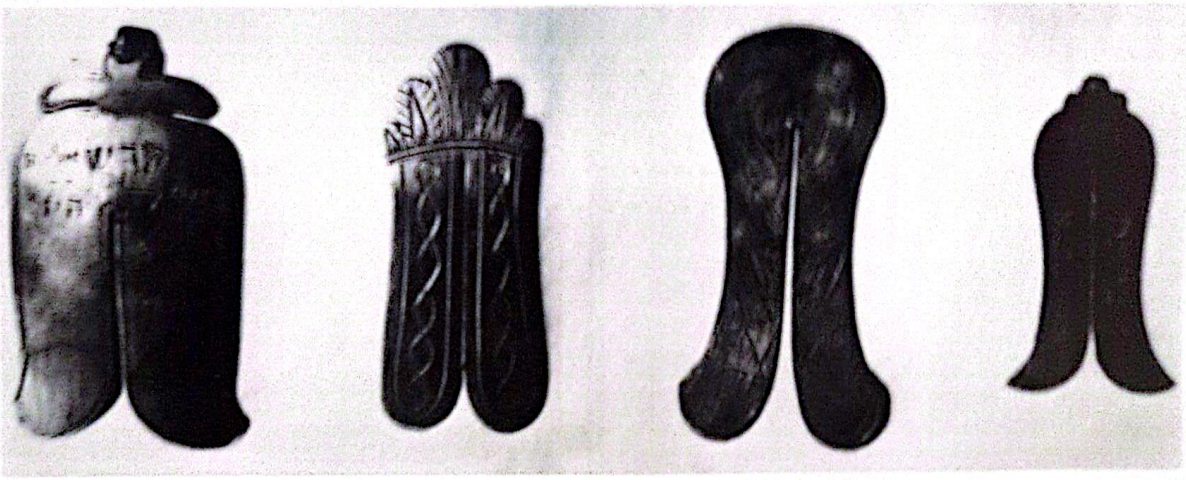
Circumcision Tray, Isfahan, 1856. Silver: engraved and chased (U 7320).



Circumcision Plate, Western Europe (F 3197).



Circumcision Plate, Mintz Collection, 18th century. Silver: rim inscribed with signs of the zodiac. Abraham with crown of priesthood offers Isaac as sacrifice. Inscription from Gen. 22:3. (m 249).



physical, you are only a being in nature, you enter into culture. In every case, the ritual will signify something analogous. But in the framework of Judaism it will signify this: you enter a culture where there is only one God and you will make no other sacrifice than that of a part of your body, that is, the foreskin which is a place sexually designated.

WM: That I can understand, but if, for example, you speak of the separation of the son from the mother, that has to mean the same thing for all people.

JK: Not necessarily, it's an entire process. The separation of the son from the mother, the child from the mother, is first of all an anthropological given, and then it is a symbolic necessity. It is necessary that this separation take place not only physically through giving birth. Yet, it is also in infancy that the child reaches the stage of separation from the mother in order to be able to speak, for if it remained stuck to her, it would become psychotic and not know how to express itself. But different peoples have perceived the necessity more or less radically. As soon as there is culture, one has the perception of the necessity. Some isolate that moment and use it as the only basis of ritual. Others perform the ritual but associate it with other events, with the fact that they are going to burn wheat, or make offerings to the god of storms or the god of the forest.

WM: But you know other tribes circumcise their children?

JK: Yes, but what I mean is that this is not their only ritual.

WM: But this isn't the only ritual of the Jews either. There are many, for instance Bar Mitzvah. What is notable about the Bedouins is that the children are not circumcised until the age of 12 or 13, or sometimes at the age of 7. Fine, I can understand how you are one among many, that is to say, you are now a Jew. This is the proof, and you can't escape the proof. You are always a Jew, and you are always a Jew because your mother was a Jew, but I don't know why the separation from the mother...

JK: I have the impression that I can only repeat what I've said because I've said all I want to on the subject. It is a separation which is also an inscription of the body of woman on the body of man, which signifies to him that he has a body and that there at the sexual level his body will bleed as a woman bleeds. It is necessary to put him in the position of the subject of a symbolic alliance.

WM: Yes, but it's only one time that he bleeds.

JK: Only one time, but that will be symbolically represented in the religious code for his entire life. He will think of it in relation to others. It's for that reason I say there is this slippage between what is done in practice, in physical reality, and then what is done in the mind. What the ritual represents exactly is also this permanent action between the physical and the symbolic, the feminine and the masculine. It is a radical distinction and at the same time has the possibility of not being distinguished. I witnessed a circumcision recently, and I was struck by the explanation the rabbi gave. It was almost exactly as I just explained. That is perhaps only one possible religious interpretation.

WM: Good, we can go on to another subject.

JK: But why did you begin with this question?

WM: Circumcision interests me now because of a poem I am writing. In the poem, there are certain characters, and among them there is one who has surprised me, because one never knows exactly what one is creating. That happens, and he occurred to me once. He has a red face, reddened by...do you know the plant "ivy?"

JK: Yes.

WM: The plant which climbs...in ancient Greece, in order to demonstrate the health of the king before killing him ritually, they reddened the face with a mixture of ivy and urine, and that struck me. From there I took off and in this poem this figure, poor guy, suffers greatly, and for that reason I started to talk about circumcision.

JK: It may be a question which subjectively interests you because of this work, but I think it is fundamental because, as you know, when asked what were the profound reasons for anti-semitism, Freud said, beyond all explanations of the Jewish people with their special characteristics which may offend others, unconscious reasons are traceable to circumcision and the fact that it represents castration in the eyes of other peoples. This is an intolerable act. It is seen as a menace, a kind of menacing election that others cannot tolerate.

WM: There are many other people who perform circumcision.

JK: Yes, but, to repeat, it is not in the same context.

WM: Because of the relation of the Jews to the Western world?

JK: In one way, but also because of the place this ritual assumes in their religion, which is unique. It is the only visible and tangible inscription of their alliance with an unrepresentable God. The rest is purely symbolic, purely mental.

WM: But for most religions, inscriptions are now only symbolic.

JK: You mean Christianity?

WM: Yes, a Catholic...

JK: Yes, but it's a religion, I would point out, that in the first

place, follows Judaism; and secondly, Catholicism does not practice circumcision. One can say that it has completely eliminated the physiological relation to divinity. Baptism is purely nominal.

WM: But Christians are not separated from their mother.

JK: Exactly. Or rather they are separated in a different way. They try to separate themselves, but they do not mark the separation in such a radical and corporal way.

WM: For you the separation is not as radical because it is not marked?

JK: It is not marked as radically, which gives to the relationship an ambiguity (as I tried to say in *Pouvoirs de l'horreur*), let's even say a perversion much more profound and widespread among Catholics. On the contrary, one notices a knowledge and a connection to what I call the truth of sex and difference which is much clearer in Judaism. Thus we will have in relation to the propensity to perversion a dawning of art in the Christian domain; and inversely a sort of rigidity in relation to representation, indeed a refusal of representation, but also a development of a much more abstract thought, much more mathematical and calculative on the side of Judaism.

WM: You've said that the *abject* and *abjection* are protections (*les garde-fous*). You've even said they are *my* protections, entries into my culture. Could you elaborate?

JK: Yes. It's necessary perhaps to reconsider the significance that I try to draw out by playing on the word abject. In French this word is situated between the terms *sujet* and *objet*. Moreover in 17th century France, one pronounced the word "abjet" and not "abject," which is even better. The abject is neither the subject nor the object. It is a notion that I try to coin and which for me represents the crisis of the subject. The crisis of the subject insofar as it would not yet be, or would no longer be separated from the object. Its limits would no longer be established. It would not have boundaries. It would be constantly menaced by its possible collapse into an object. From that moment of collapse into the object, it would lose definition. It is a question, then, of a precarious state in which the subject is menaced by the possibility of collapsing into a chaos of indifference.

The abject is, I think, a primitive formulation on the chronological scale as well as in a logical sense; it is the ultimate separation or the most archaic separation, a modality in which I am not yet a subject in relation to an object except by a spasm, by a jump. I attempt to disengage myself from it; I attempt to constitute a fragile limit between an entity that is "I" and this other which will become an object. It is a kind of shudder, of revulsion, of violence, which is not so much somatic as symbolic and which is a way of tracing an ancient and fragile limit. That's why I say that the abject is a means of constituting a primitive identity and, because it preserves me from chaos, it is a kind of protection.

In order to be clearer, I can give some examples. I was thinking basically of certain patients I have who can be described in the current terminology as "borderline" (a state in which psychotic phenomena occur rather frequently and which consists precisely in this kind of confusion of the limits between body and identity, and following from that are different kinds of hallucinations, the loss of identity, etc.). When transference begins to surface in analysis, one notes that feelings of abjection become evident as an attempt to locate one's own boundaries, one's own identity, before being able to say: I am this and he is something else. I mean abjection in the sense of nausea, vomiting, and other physical symptoms, or abjection in the moral sense as rejection of a certain member of one's family or a member of one's group.

One could say that these feelings of abjection in the framework I've just described resemble the phenomenon of hysteria, or rather they are linked to a very strong anality, since all that is repulsive leads back to waste. Thus one who is attracted to these waste-objects perhaps has an eroticized relationship to his own anality. While this is all true, I think the phenomenon of which it is a question here is much more fundamental still than hysteria, for we are witnessing not only the simple play of sexual uncertainty: Am I a man? Am I a woman? How do I appear? Am I beautiful or not beautiful? —questions which an hysteric asks. The borderline is at the frontier of being and non-being, and it is within this boundary of being and non-being that this spasm, this violence, this rejection of the other, appears at the same time. And that's why I take it as a very archaic phenomenon, closer to psychosis, and as a fragile distinguishing mark in relation to psychotic chaos.

WM: Could you link that with the idea you have expressed in *Pouvoirs de l'horreur* that one who enters into the abject, who perhaps becomes a writer, is someone who asks himself: *where* am I instead of *who* am I? In the philosophy of science there is what is called in English a "dispositional." I don't know the term in French, but take the idea of magnetism, for

Opposite left:

Circumcision Instrument-Shield, probably German, 19th century.

Circumcision Instrument-Shield, Poland or German, 19th century. Silver: cross-hatched design similar to German and Polish Torah shields (S 1432).

Opposite right:

Circumcision Instrument-Protection Plate, Italy, early 19th century, The Benguiat Collection (S 234a).

Circumcision Instrument-Protection Plate, England, 1812. Used by Elias Hayyim Lindo. Silver: engraved. The Benguiat Collection (S 233a).





Circumcision Knives, 18th century. Silver (80-47, S 1434). Inscription on knife at top: *And...Abraham circumcised* ...(Gen. 21-4).

example. You don't know what magnetism is. You know very well that you have an attractor. You have iron, and there is a movement of the one towards the other. You can trace the field around the attractor, but to explain it is impossible. What is it? It's like the movement of an electron: you say it is the movement of an electron, but you know you can't actually distinguish that and say it is electricity, because the phenomenon of electricity is so much more extensive than only the movement of an electron. So for me the idea of the abject is a form of "dispositional." In other words, because one cannot scientifically explain a "dispositional," it is for the writer, the poet to explain it. As he writes he attempts to explain what abjection is in relation to the mother or in relation to the world. But that is also linked to the idea of protection (*garde-fou*), because protection is also a barrier, and the artist is always isolated. Thus there is this barrier between him and the world.

JK: What I'm drawn to in what you say is first of all the spatial aspect of this condition, and secondly how the writer situates himself in relation to abjection. Perhaps I will start with this second aspect. Obviously in the process of writing, and especially in modern texts, there is an imaginary incertitude from which writing proceeds. One has the impression that he who writes had to pass through a zero degree of his identity, through this kind of convulsion of his limits, and that the entire work of writing is an attempt to give shape to this identity which henceforth becomes indefinable and polyvalent. When I say this "convulsion of identity" and "narcissistic crisis," I understand by that an erasure of boundaries between the play of the self and the other, the subject and object.

In this circumstance the most archaic and radical confrontation which is produced is surely a confrontation with the maternal object. And everyone knows the place that incest represents, the negation of incest, the identification with the mother, the rejection of the feminine, etc., throughout world literature. The result can be different forms of homosexuality, different kinds of anti-feminine invective, the misogyny of great writers, or the result can be "Madame Bovary c'est moi"; the possibilities are endless. But there is always this place of simultaneous repulsion and fascination which I call the abject. One must emphasize that in the word abjection there is also a fascination, because if I am not fascinated, I have nothing to repulse. I can say that the other is null and void, and that I'm not interested. Thus there is this kind of dance around the mother which is produced throughout the history of the imaginary and of imaginary forms, especially in literature.

Then how are you to perform this imaginary dance? If I can dance, a space is already implied. Thus it is a question of marking limits: you are grabbed, you retreat, you are designated, you blur the meaning, you give a precise meaning. After that you bury it in a connotation, and you approach nonsense by means of glossalalias, plays on words; in effect the entire project of modern poetry is involved in this process. Some will even go so far as to attack language, eradicating the sounds of language so that it reaches a point of no longer meaning anything, but of being only a sonority, a music: what is called a style and a way of giving yourself limits, as well as permanently effacing them and multiplying them as well. The result is that you obtain this immense set-up (*dispositif*) that is a literary work.

WM: Do you believe there are those in the world who do not have a relation to the abject?

Right:
Circumcision Plate, Eastern European, 1831. Pewter: cast and engraved. On rim quotation of Gen Sacrifice of Isaac. On Back engraved name of owner: *Joseph Adler in 591 (1831) of the short reckoning (F3170).*

The circumcision shields are used as guides for the cutting of the foreskin; the pillow covers the circumcision bench upon which the person holding the child sometimes sits; and the infant is brought on the tray to the *mohel*, the man who performs the circumcision.

The circumcision instruments and attendant paraphernalia are from the collection of the Jewish Museum, New York City. Photographs are courtesy of the Jewish Museum.

Right:
Circumcision Set, in case of tortoise shell and wood. Most of the objects are silver from Holland, early 18th Century. (Im 55-61).

3 protection plates (Dutch)
1 Kiddush cup (French)
1 cup sucked blood (Dutch)
1 stick with linder to stop bleeding (Dutch)





JK: No, I don't think so.

WM: So then it's...

JK: It's like the question you asked a while ago about circumcision: a universal mechanism is manifested there in a specific manner. Is the entire world psychotic? Yes, everyone is psychotic in some way. Melanie Klein even maintains that every child passes through a psychotic phase. But it's more or less; you see it in dreams: either you can have a very violent relation with the abject when you dream or when you have been wounded in an incident which happened in the street or at work, but afterwards you can forget or repress it and take a math course or drive a locomotive, etc. But a writer is someone for whom this condition of the abject is never closed. It is always there in the realm of appearances, and he never stops working on it, except from time to time when he takes a drink, joins a political party, which is another way to repress it, because it's necessary to survive; but these are distractions. I think the subjectivity of someone who is devoted not simply to literature, but to art in general, is a subjectivity continually open and put into question, and thus it parallels abjection for the simple reason that the boundaries between subject and object, once more, are permanently put into question.

You asked just now, and I think it is a phrase from the book, is the writer someone who poses the question: where am I? In effect, the great concern of the subject in constant crisis is to situate himself in a set-up (*dispositif*) which is that of the world but to begin it with his own language; because his world is that of language, and there is really no difference between the two. There is a doctrine which fascinates me very much and which gives a resonance to my work. This is Gnostic thought of the second and fourth centuries. The Gnostics were marvelous people who were not repressed by the official dominant Christianity. They were, precisely, people for whom the fundamental question was one of knowing where they were. It was a question of localization, since the world was lived on many levels. There were diverse stratifications of divinity as well, and it was a question of being able to situate oneself. They were wanderers and saw themselves as voyagers, as nomads, without place, without precise definition. Instead of interiorizing this incertitude in the form of an interrogation we could call hysteric, where one is fascinated by the self (who am I? man or woman? beautiful or not beautiful? handsome or not handsome?) the question was of knowing *where* am I, a question much more radical and more archaic than the question of identity. In this situation where I ask myself the question of where I am, you might say there is no longer any self possible.

WM: It's like a well, and one can plunge deeper and deeper. But in asking who am I, is that really a question of asking am I handsome, am I intelligent? Are these really the questions one asks in such a self-interrogation?

JK: That depends on the structure. In effect, when an hysteric asks who she is, in general she is asking whether she is a man or a woman.

WM: Yes but...

JK: The obsessional asks himself if he is alive or dead. In this position of a more radical interrogation closer to the questions of psychosis, it is a question of asking if I am or if I am not, and more precisely even: do I have a limit?

WM: What I don't entirely understand is the relation of asking am I handsome? to do I exist?

JK: It's a side issue.

WM: For me it is a question of where I am, where I am in relation to other men who are more or less handsome.



Pillow Cover of Circumcision Bench, Europe, Western Ashkenazic. Inscription date: 1728/9. Red velvet embroidered with polychrome silk and metallic. 73 cm. × 67cm. Gift of Dr. S.A. Buchenholz through Rabbi Luriw, 1937 (U 7320).

Brith-Milah Bench, made of two Italian chairs, 17th century. Gift of Mrs. J. Bromberg, New York (J 175-51).



JK: I think you are going a little too far. It can all be expressed in spatial terms. What I wanted to express through this...

WM: I don't think the whole thing can be put in spatial terms.

JK: Yes.

WM: I don't know if, for example...

JK: All formalization is already spatialization.

WM: For example, if I ask myself: am I a Jew, it is not a question of asking myself: am I a Jew in relation to Christians, in relation to Catholics, in relation to Buddhists. Rather, I'm in the process of asking myself in my interior, if I may speak of an interior, where do I find the feeling of Judaism, which in me is not at all a feeling of place, but it is a feeling and it is *there* where one asks who am I.

JK: But I don't think we're speaking of exactly the same thing. If I understand you correctly, one can situate oneself in relation to a doctrine: where I am insofar as I am a Jew means how I situate myself personally in relation to the Jewish religion or what is my place, what is the place of this Jewish divinity in me.

WM: No, that's not at all the question for me. The question is: do I feel this sentiment.

JK: But what does that mean: do I feel...

WM: I don't know. If you like, that's another "dispositional."

JK: You must understand that I work within a very simple Freudian framework. Otherwise, when one abandons these co-ordinates, I have the impression one is lost in vagueness.

WM: Or perhaps not; because for me, as you say, there are things which are inexplicable. And, as you say, the abject in the end is not this, is not that, but it is not *nothing*.

JK: Yes, but I didn't say that it was unexplainable. All that I tried to say was that the abject is inscribable in any case.

WM: Yes, inscribable but also describable.

JK: But all working explanations in science are in large part descriptions.

WM: So it is the artist who undertakes this description.

JK: To locate and describe the abject.

WM: To describe a "dispositional."

JK: Yes.

WM: For me, when one examines oneself about a "dispositional" one is in the process of asking oneself who I am, and it is not at all, am I handsome, am I...

JK: It is the difference I would emphasize, because in this kind of question: am I a man, am I a woman, am I beautiful, the question is imaginary. It is the representation that I make for myself in relation to certain values. Whereas with the abject, what I would like to communicate is that we are in the underground of the psyche at a very archaic level where the idea of an imaginary comparison has not yet been posed. The abject is at the substratum of any possible identification or projection.

WM: That's exactly where I find myself when I examine the feeling of being a man. That is to say, it is necessary when embarking on this self-examination to investigate the questions which one asks because with this question of who I am, one begins to descend into the well of feelings, and that's when the bars fall away.

JK: One of the fundamental questions, perhaps the most important for people in this archaic position where limits are lost, is the question of the difference between their *outside* and their *inside*. And not even "their," because "their" inside proves that they already possess this inside. Yet that is not the case, rather they ask themselves: do I have a limit in relation to

an exterior, is my skin a limit or is it completely transparent, letting the outside enter me. It is this primitive and archaic...

WM: But for me that is not a question that one can really answer.

JK: It's not a question. At the limit, one has no need to respond to it. Rather, it's an experience, which one who has lost all limits, has for specific psychoanalytic reasons.

WM: One who hasn't lost his limits but one who wants to plunge deeper.

JK: Here it's not a question of volition. The people in this kind of condition suffer a great deal, unless they have found a way to talk about it that one can call somewhat superficially *literary* and in that case it is the word which becomes the container, the skin which permits them to either separate or not separate themselves from the outside world.

WM: I have a question in regard to this which is perhaps ridiculous. Is there a reason why poets die young and painters live a long time?

JK: There are old poets too: Milton.

WM: Yes, I know. That's why I say this is perhaps a ridiculous question; perhaps not die but torture themselves, something like that?

JK: There is definitely in the use of language something which is much more flammable because it concerns identity. This is less true in the making of a painting, a color, a sound. Because with language it is meaning which is achieved, the manner in which I have of speaking of myself. If this primal material is shattered, made incandescent, one will not manage to control it.

WM: The *pneumos* of a poem.

JK: All the same one collapses. So to use a very abused term, there is a kind of much more palpable *perversion* in the utilization of tactile materials, sounds etc.

WM: That is what you mean when you speak of the inhumanity of the poet?

JK: Yes. But when I spoke of perversion I meant that in work with color and sound there is a much more marked perversion which allows one engaged in this practice to endure. I have an object, I make it, I suffered while I made it, I've had to pass through stages of a loss of identity, of course, but there it is. There is a market for paintings, dealers, prices, there is a whole politics of galleries and display, museums etc. The process becomes objectivized, it becomes a market value, it permits me to survive, and it's this that I call a perverse relation to aesthetic production. In the case of literary works, this commercialization process doesn't exist, or only rarely, and only very rarely in the case of the experience of the avant-garde. For example, consider the difference in value between the works of Joyce and Artaud as compared to a painting by Rothko: there is no common measure. It is in this kind of thing that one of the answers to your question lies. One can fetishize music and painting as products; it is more difficult or not even possible to fetishize a text, a poem, because their meaning is pulverized and doesn't become a partial object.

WM: To go in another direction: what do you mean by an anal penis?

JK: That's not my idea. It is common throughout psychoanalysis. One hears this very often in analysis. When a little boy or little girl, let's take a little girl; when she denies sexual difference and behaves like a little boy, let's say, she can have several fantasies; most notably she can imagine she possesses this penis that she lacks from behind, a form of eroticism of the anal sphincter.

WM: So it's not something physical?

JK: No, it's imaginary.

WM: An image.

JK: Yes, image, sensation, fantasy, which exists to deny sexual difference. From there one enters the entire gamut of relations classified as perverse: sodomy, etc.

WM: So you agree with Bataille's idea that anal eroticism can be something different from sadism?

JK: Yes.

WM: Could you elaborate?

JK: What is understood by the term sadism is the aggressive drive and its expression in the form of sexual but also physical violence directly inflicted on the body of another. And we assume that the basis of this violence and this agression is the anal drive. Thus sadism and anality are linked, the anal drive being the drive of expulsion and rejection, thus of violence in opposition to the oral drive which is one of incorporation, attachment, and integration. So from this point of view, sadism and anality are linked, but there is a moment when they are separate. Sadism is what I've just described: violent action upon an object, whereas anal eroticism can be not only a passive act, the pleasure that one enjoys at the level of the anal sphincter, but also a kind of perverse relation once more, a valorization of all that is waste: an excitation from fecal material, waste, urine etc., which has no direct relation to violence and to the sadistic treatment of another.

WM: Aren't you now referring to auto-eroticism? You are not talking about an eroticism between two people.

JK: It can happen between two people. That is to say, there is always a partner, and there may be a sympathetic or complicitous partner. But you are right to emphasize the fact that the pleasure which is experienced from that act is essentially auto-erotic, even if others participate.

WM: If it is not sadistic?

JK: If it is not sadistic, yes.

WM: Another thing which interests me in what you've said, but perhaps it is my imperfect knowledge of French, concerns Molly Bloom. I love Molly Bloom. You've struck one of my idols.

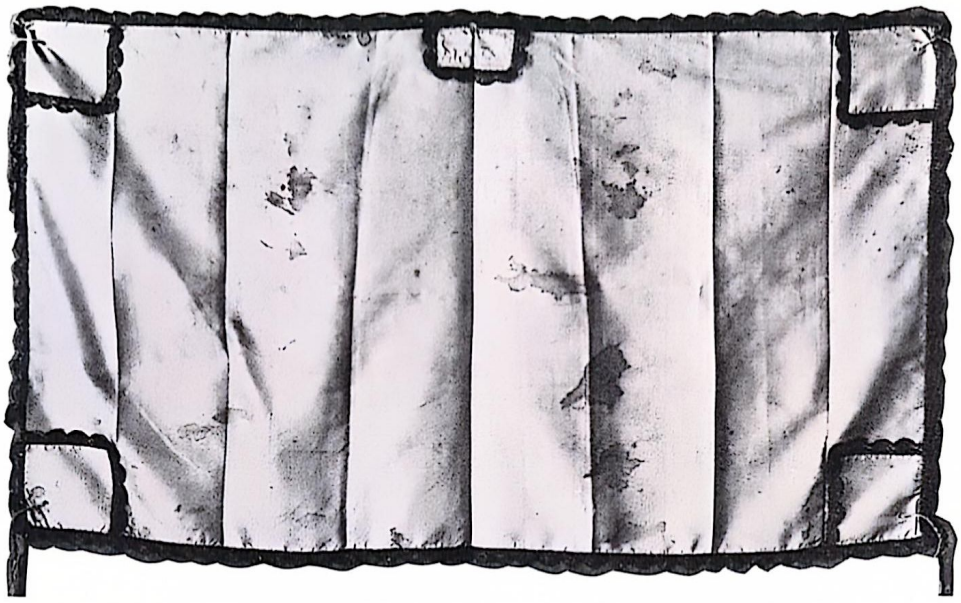
JK: I was wicked with Molly Bloom?

WM: Not wicked, but perhaps, as I say, it's my faulty French.

JK: Perhaps it was not Molly Bloom, the beautiful and admirable Molly, but the Molly of Celine. I compared her with Molly Bloom. There have been many programs about the book on French radio and elsewhere as well. Everything was spoken about: the sexual pleasure of women, Jews, everything but Celine. One can always say that there wasn't enough time, but no one talked about Celine. I think it has to do with a hatred, irritation, and rejection of Celine.

WM: I never read his books in the United States and only began to by chance. It's the fact that although I speak German, I find it difficult to speak it because I'm a Jew.

JK: Perhaps, insofar as you are a Jew, more particularly because you have this reticence; but I believe there are many American intellectuals, for example Burroughs and Kerouac, who have known how to appreciate his apocalypse or carneval. This is something French writers have only permitted themselves very recently. Concerning Celine, there has been a split between the extreme right, who said Celine is great even if he was anti-semitic, who cares? And then the left insisted that one can't be at all interested in him because he was anti-semitic. So because of this conflict, he has remained at the bottom of hell in the library. That is not to say people don't read him. He's published in the Livre du Poche, but he's not



Tallis used at the Brith-Milah, white and yellow silk with gold borders, 18th century. The tallis was apparently worn by the godfather to put the child on it, during the circumcision and afterwards to cover the child. This piece belonged to the Carlo Modigliani family. The donor Mrs. Adriana Scharf is the wife of Dr. Samuel Scharf of Rome (Jm 29-58).

talked about because he is irritating.

WM: I found the same problem with Ezra Pound. Poetry for me is relatively new, so when I started to read him it was a revelation. For example, for me the 56th Canto is one of the greatest poems in our literature. But in other Cantos he speaks of...

JK: Yet it's necessary to talk about it all the same, and not simply to consider it an aberration that these writers were like that. They were at a certain moment fascist or had fascist tendencies. If we don't interest ourselves in why, it will happen again. It is necessary to explain how and why. One finds a similar tendency with the Russian avant-garde, not Khlebnikov, but Mayakovsky, who went rather far with his art in a formal sense but who, at one point, found himself with the Stalinists.

WM: In your discussion of Molly Bloom, you use the expression: "the debilitating obscenity that we experience in Joyce's Molly Bloom." What is your understanding of this debilitating obscenity?

JK: I think there is an extraordinary play in Joyce with debility, and I think that anyone who is concerned with literature and psychoanalysis who doesn't see this is trying to save I don't know exactly what kind of intellectual value in literature. But one of the most passionate things which modern literature attempts to do, especially Joyce, is to engage this debility and to discover how this kind of identity that we were speaking of is so uncertain and how at a given moment one is trembling not only on the verge of psychosis but idiocy as well. It's the sound and the fury, the Shakespearean resurgence of Faulkner. It is also, in a certain way, all that *Finnegans Wake* is: babytalk, portmanteau words, nursery rhymes. It is a way of showing how this stunned blankness, this loss of symbolic control is permanent in the human spirit. So to define the debility of Molly: one sees it very clearly in the monologue. It's a way of passing from one thing to another, of not having to provide connections, of interesting oneself in fantastic bizarre things. One can say, too easily, well, this is Joyce's misogyny. He sees women as everyone does: superficial, erotomaniac, preoccupied with objects or even sexual relations with the men she's met...

WM: And how do you see women?

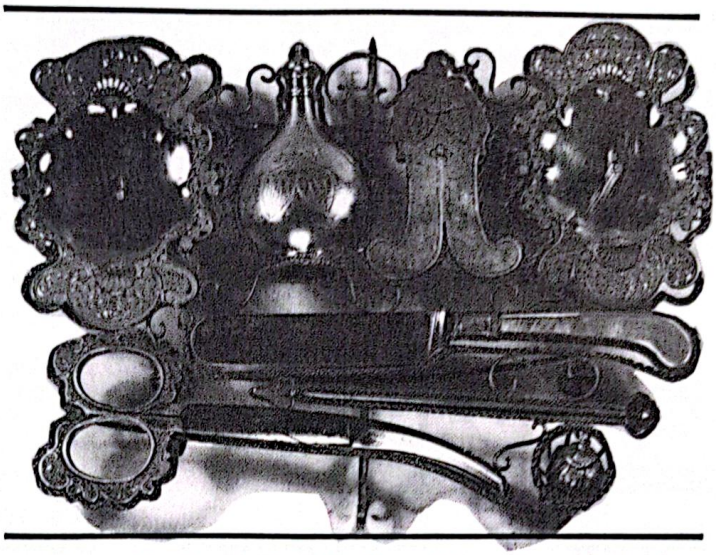
JK: I don't think *woman* exist. I believe there are particular differences, and that is what interests me. You understand that I am not much at ease in feminist movements because not only do they think women exist, they think *woman* exists: in a genetic sense which subsumes all the qualities of all women. I am against the idea that woman exists, a kind of new divinity which they are trying to impose on us. I find *that* debilitating, actually, in the pejorative sense of the term; pejorative because violent, because it imposes an ideology which wants to be strong by replacing other ideologies. I'm also against women because, how shall I say it, it gives the impression that there is a community which shares necessities in common. This is not entirely false because there are, in effect, things to obtain: equal rights for women, equal pay, and that kind of demand. But to a certain extent everyone is in the process of understanding how right women are on this level, and so it can be carried out. One goes through open doors, and that is not so interesting.

What is interesting is to show how each woman is different, in what she is different, and what she brings that is different. I did an article, it is an interview, in a Belgian feminist journal called *Le Grip*, and my title was: *"Unes femmes"* I put an "s" after *une* and after *femme* in order to say that there is indeed a multitude of women, but the interest of the women's movement is to try to see how each one is particular, to try to leave behind these monovalent and uniformist ideologies. There were the proletariats, there were the blacks, there were the different national minorities. But everyone within these groups is under the same common denominator, and now here we have *women* in uniform. It's O.K. Why not? But within these groups how is each one different? It is, therefore, necessary to set free the imaginative and symbolic abilities very particular to each one of us.

WM: And the future?

JK: I don't know. I'm not a prophet. What is it you mean? Whose future? Of what? How? I am not very optimistic. It is a question, perhaps, which comes from the optimistic preoccupations of progress, of vision, of ultimate goals. I think the world today is a world in which prediction is impossible. What interests me, rather, is to concentrate on the present moment, and it is here where one uncovers the past and, perhaps, certain possibilities of the future. Only this preoccupation with immediacy, this kind of opening onto the present moment, gives substance to analysis.

Translated by John Johnston and Roy Skodnick



Circumcision Set, Russia, 1827. Silver: filigree. Owned by Jacob Nahamuan Torres (J 232).

Prayer for the Brith Milah Service, written on parchment with rosette ornamentation, 19th century, Jerusalem, 17½ cm. x 11½. Inscription: *Made by the hand of the sofer by the Torah's Tefillin, Meznoth Jerusalem, may it be rebuilt, established, the holy city* (Jm 41-61).



NOTES FOR
MAXIMUS POEMS IV, V, VI

Charles Olson

Introduction

Winding far down from within the very heart of this spiked Hotel de Cluny where we stand—however grand and wonderful, now quit it;—and take your way, ye nobler, sadder souls, to those vast Roman halls of Thermes; where far beneath the fantastic towers of man's upper earth, his root of grandeur, his awful essence sits in bearded state; an antique buried beneath antiquities, and throned on torsos! So with a broken throne, the great mock the captive king; so like a Caryatid, he patient sits, upholding on his frozen brow the piled entablatures of ages. Wind ye down there, ye prouder sadder souls! question that proud, sad king! A family likeness! aye, he did beget ye, ye young exiled royalties; and from your grim sire only will the old State-secret come.[1]

[the artist] looks inside the finished forms that nature sets before his eyes.
The deeper he looks, the easier it becomes for him to extend his view from today to yesterday. And in the place of a finished image of nature, the crucial image of creation as genesis imprints itself on him.
It dawns on him that the process of world creation cannot, at this moment, be complete.
He extends it from past to future, gives genesis duration.
Does the artist concern himself with microscopy? History? Palaeontology?
Only for purposes of comparison, only with a view to mobility. He is not interested in a scientific check on fidelity to nature.
But only in freedom.
A freedom that does not lead to set phases of development, exactly as they once occurred or some day will occur in nature, or as they might (one day demonstrably perhaps) occur on other planets,
but rather a freedom that demands to be mobile in the same way that great nature itself is mobile.
From prototype to archetype.[2]

the "body" in writing is an innate "face" made to
occur under the word-water (or paper)
forever[3]

...I would go so far—if you will excuse my Americanism—to think that you write...as though you were *underneath* the letters. And I take that a hell of a lot larger. I would think that the hoofbeat of the creator is on the bottom of creation, in exactly the same sense.[4]

After closing Black Mountain College in 1957, Charles Olson returned to Gloucester, Massachusetts where he had not lived since 1940. *The Maximus Poems* were begun away from Gloucester as letters to the city. Sections I & II of volume one were written mostly at Black Mountain from 1950 to 1953 when the poem "got off its proper track"[5] and Olson attempted to engage other areas of American history and geography. Taking up residence at 28 Fort Square, in the apartment with extraordinary views that faced Stage Head across the outer harbor "(like backwards/of a scene/I saw the other way/for thirty years)"[6] Olson at 47 re-began Maximus and completed section III of volume one in the next two years.

The recalcitrance of his physical and cultural isolation during the second Eisenhower Administration, with urban renewal and the Federal Highway System assaulting earlier forms of the city, led him to concentrate on the beginnings of Gloucester in Stage Fort Park, the site of his childhood, where the English came ashore and began fishing from this continent (and immediately fought over property rights). He had written of climbing Tablet Rock as a boy ("the rock I know by my belly and torn nails"), as if history were inscribed on his body. By 1959 Olson was planning a second volume, and he back-tracked to sources in his life that become the impetus to a different kind of book, but the change is evident in these poems of his "homecoming"[7] which talk "a language peculiarly adjusted to/the topological as a prime and libidinal/character of a man, and therefore of all of his/proximities..."[8] The infolding of history, memory, and geography become a base from which to explore the prehistory of the landscape and his identification with it. The historiographic motive of the poem continues (with investigation of land deeds and town records) but Olson's possession of Gloucester is more specific, intimate, and linked to other motives. In a significant, early review of *Maximus Poems IV, V, VI* J. H. Prynne wrote:

> Olson's poem is growing back into itself and its historic matrix, not outwards and upwards from it. The mythography, now less nervous about its infringements of interior moral right, can touch with true levity upon its base; the syntax is if anything *more* temporalized, *more* sexual, than before.[9]

Stage Fort Park, the Cut and the tidal Annisquam River, and Dogtown (the inland glacial meadows of Cape Ann) become Olson's terrain for "the visionary recital of the soul."

These three sets of notes are selected from a *massa confusa*[10] of several hundred hand-written pages Olson kept from 1959-62 as a daybook of research and writing strategy when he had embarked on "his most explorative work"[11] *Maximus Poems IV, V, VI*. Olson was a scholar and poet of elaborate means as well as "an unusally interesting theorist."[12] He evolved a kind of diagrammatic writing to orient the fundamental process of his poetry. Within "the haunts and habits" of this daily exercise, the poems nest alongside methodological notes, marginalia and annotations of important texts, maps and historical debris. This ensemble of material eventually affected the graphic dimensions of page size, typography, and layout in the finished work. These notes are a poetics, but they are also the under-structure or stem of the poems themselves; edited, they would complement Olson's works of methodology. Archivist George F. Butterick distinguishes this sequence as one carefully ordered and dated by the poet "when he was fairly settled in Gloucester...and at work every day on the materials that would extend *The Maximus Poems* into its second volume."[13] "Proprioception" and the "Letter to Elaine Feinstein" are two works Olson put together from these worksheets; and in the Beloit Lectures of 1968, *Poetry and Truth*, he discusses the terminology and procedures first explored here.

On a sheet dated March 3, 1960 under the heading "my

going situation" Olson summarized his activity:

> the usableness of this method 1.
> 2. daily starting on paper along the phylo-line
> of however it starts to get sd—
> circular as annular practice of
> 'same' basic material until 3. it issues in
> something if it does: the word issues from the mouth and
> stomach
> and any larger poem or
> writing to come as a result of *clearance?*
> (like back over notes for poems or knowing where
>
> historical then to do like walking? seeking?
> or simply drift:
> the word as thing does sort itself? (as of ear and line
> opens up all the possibilities

In early December, 1959 Olson wrote the two long initiating poems "Maximus from Dogtown—I" and "Maximus from Dogtown—II" which situate the major themes of the book. The first set of seven pages here (dated December 15, 1959) shows Olson enlarging the figure and action of Maximus from the classical orator in volume one who identifies types of civic virtue to a more primitive and magical presence who will experience initiation and undergo transformations in Dogtown which Olson associated with the unconscious and a descent to chthonic deities. Throughout December he was reading Jane Harrison's *Themis,* and these pages are, in part, his notes on the chapter "Daimon and Hero" which traces a series of Greek gods and heroes to the archaic "daimon of fertility" in the form of a snake that Maximus discovers "entwined/throughout/the system."[14] Olson was also reading Nathaniel Wingate Shaler on the geology of Cape Ann and Edward Sapir on North America Indian languages.

The first page,written in two different colors of pencil, is the most important. It reads like a glyph where Olson carves entry points for his vision of the earth as "genetic" and the substantive ground of the nominalizing powers of language. In the upper right corner are definitions of his working triad: topes, typos, tropos that are the axis of the poem, or as he said at Beloit:

> And there have been now for nine years, three words that have constantly forced me down, or kept me in, or possibly steadied me... to try to give you the shape of the whole, and the inner, the motor of my own experience, is these—to say these three words.[15]

The three words intertwine ("anyone of these alone leads to a miss") and allow him to hold onto the emergent image of creation as he writes it here: "the Black Chrysanthemum" that first occurred as a dream dictation. Further down the page Olson points to his poem "The Librarian" as his guide on "how to act" and "how process [is] recorded." Written by 1956, the poem is a prophecy of Olson's return to Gloucester; the landscape is in a sexual turmoil of Oedipal rivalry. Not part of the Maximus sequence, "The Librarian" is a model for how Olson imprints the landscape with psychic forms; it shows Olson becoming Maximus. The symbolic actions Maximus performs in volume two will resolve the conflict; for example, the concluding "*The River Map* and we're done" reads as a mirror opposite of "The Librarian" as the sexual presences of the Cut and the Annisquam River are calmed and celebrated.

The second set of four pages (dated January 17, 1960) returns to the definitions of a poetics in the "Letter to Elaine Feinstein" written in May, 1959; throughout this sequence there are several ruminations on that extraordinarily compressed statement. The third set of three pages (dated March 17, 1960) shows Olson mapping the physical sites he will explore, tracing the earliest divisions of Stage Fort Park. At Beloit he spoke of how a poet comes into possession of his images and defined mythology concretely as "the orgin and experience of an image." No less than the landscape, these notes are the "labyrinth" and "crawling-place" where Olson gained "traction" into the poems.

R.S.

Notes

1 From Chapter 41, *Moby Dick,* a favorite passage of Olson's since he first studied Melville and to which he refers several times in these notes, as he goes "inland, to/Dogtown"; "The Distances" dated October 17, 1959 also makes use of it.

2 Paul Klee, *The Thinking Eye* (New York, George Wittenborn Inc, 1961). According to Butterick, possibly the passage Olson is referring to when he mentions Klee in *Poetry and Truth, Muthologos,* volume two (Four Seasons Foundation, 1979) p. 39 and note on p. 181.

3 Charles Olson, in a note dated January 9, 1960 from this sequence.

4 Charles Olson, *Poetry and Truth.*

5 Charles Olson to Cid Corman ("Letters for Origin," Glover diss., p. 220); see *Olson:* The Journal of the Charles Olson Archives, #6 for these unpublished Maximus poems; Olson writes the titles of several on page five of the first set of notes here.

6 *"Maximus, to Gloucester", The Maximus Poems* (Jargon/ Corinth Books, 1960), p. 107.

7 Don Byrd, *Charles Olson's Maximus* (University of Illinois Press, 1980) has an excellent discussion of this period; see also Sherman Paul, *Olson's Push* (University of Louisiana Press, 1978).

8 *"John Burke," The Maximus Poems,* p. 144.

9 J. H. Prynne, "Charles Olson, *Maximus Poems IV, V, VI"* reprinted in *Io* (Winter issue, 1973). See Olson's response to Prynne in *"The Paris Review Interview"* in *Muthologos, op. cit.*

10 George F. Butterick uses the term to characterize Olson's papers in their entirety. "Modern Literary Manuscripts and Archives: A Field Report" (*Credences,* New Series, Vol. 1, No. 1). Jung writes: "The 'shapeless life-mass' immediately recalls the ideas of the alchemical 'choas,' the *massa* or *materia informis* or *confusa* which has contained the divine seeds of life ever since the creation." *Psychology and Alchemy* (Princeton, Bollingen Series XX, 1968), p. 144. See Charles Stein *The Secret of the Black Chrysanthemum: Charles Olson's Use of the Writings of C. G. Jung* (Doctoral Dissertation, The University of Connecticut, 1979). I wish to thank Charles Stein for first showing me these notes and George Butterick for helping me select these sets.

11 Butterick, *op. cit.*

12 Robert von Hallberg, *Charles Olson: The Scholar's Art* (Harvard University Press, 1978), p. 1.

13 Butterick, *op. cit.*

14 "HEPIT NAGA ATOSIS," *Maximus Poems IV, V, VI* (Cape Goliard Press, 1968) [np].

15 Olson, *Poetry and Truth.*


"relations are normalized"
Topology
"path"
"vision"
"dream"
GOD
GENERATIVE
LOCATIVE
ABLATIVE: ABLATION
"Removal by surgery"

Dec 15

2 after supper
summary:

"local relations
are nominalized"

I
Any one of these alone
leads to a miss (like ?
the 6th Solid

II
sitting in the fire
feeling solely
make possible

the 'city'
of-like-"God"
:check Augustine's
and in any case observe
this connection of
metropolis: to
lead the 'citizen' to
God, to the Creator
Begettor

object-act
tropos-genetic-life in)cave
typos -morphe (sign of cosmos
on ground

Jacob's Ladder

topology
(congruence ?
check Melville
review- & Weyl

active imagination
hypnogosis
dreams

purpose to "pose" locus
means
for to place spot
where the mother
holds the child in herself is purpose

(where)
topos it place Gloucester Mecca

(bent)
tropos me how process circumambulation

(sign)
typos it cosmos Black Stone Ka ba

"I am He"
sum SUM

? "path" (like, Tao - or "way") wld
be all 3 necessarily

? "vision"
(like 'face of God' - Goal:

"dream?"

1 instruction : "4"
what to the structure of creation
obey as one
to

rhythm (time left out)
image

feeling-knowing: occupying time
construct occupies space

pattern - sign the
typos bottom
3 as archetype of the
as motion body
2 as crawling drag it tropos
1 where on ground
cave any
from ocean others

case of
source or possession

2 the Black Chrysanth mum
why

3 "The Librarian" itself
as obedience
how to
act (how)
process
recorded
'novel'

one's own novel action:
(why)

genetic: is morpho - (what)
it
self "life" "cosmos"
nature real
'primordial' 'consequence'

Genitive to give
Dative a 'case'

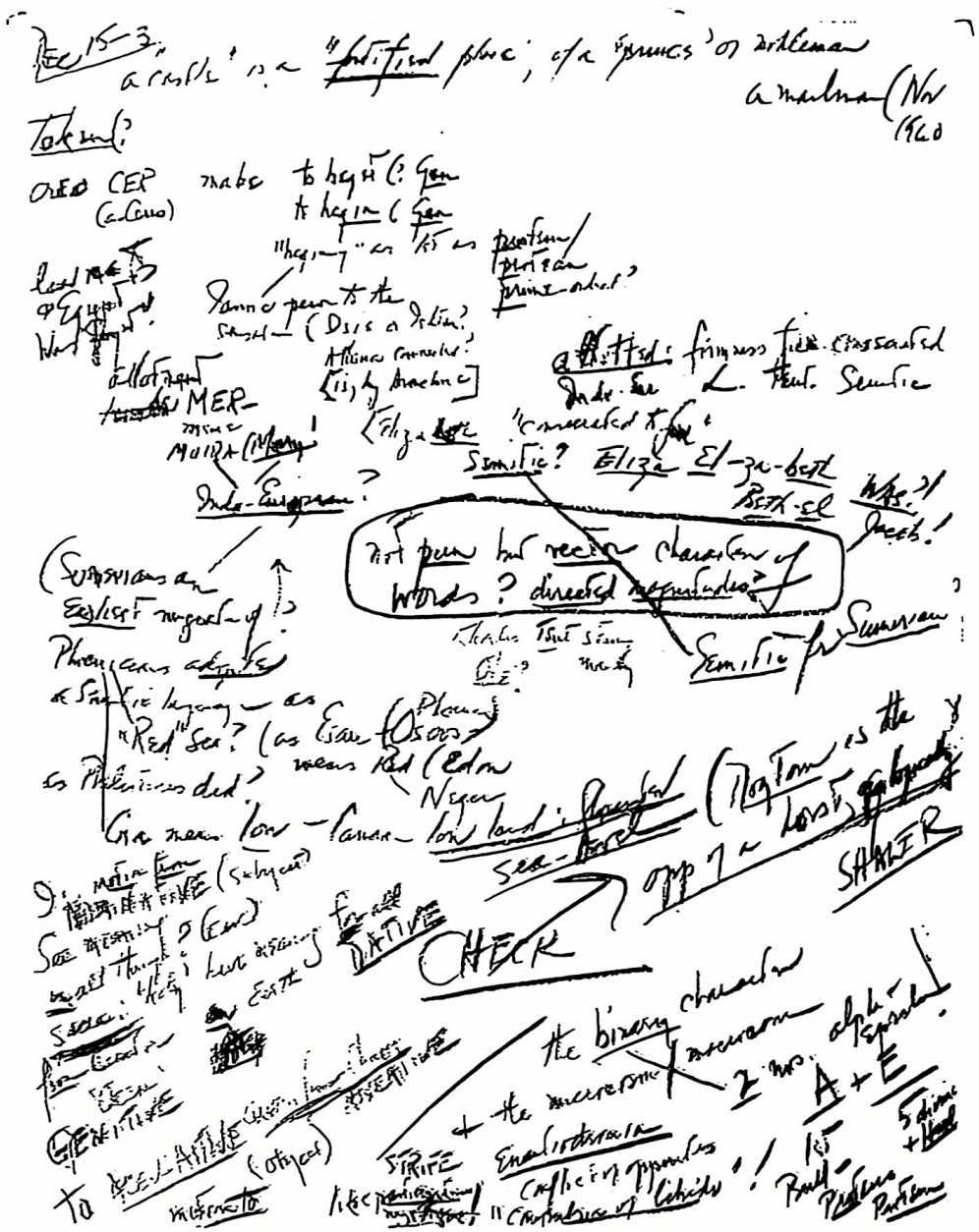
"by" oneself
"of" creation
"for" God
"to" others
"toward"
"away from"the wrong

These prepositions are in
purpose from are locative what
on why
where are
how adverbs?

When: now a 'case'

Locative

ion
[Ablative:Ablat(e) "Removal especially by surgery"



Dec 15-3

a "castle" is a fortified place" of a 'prince' or nobleman

Token (? a mailman (Nov 1960

creo cer make to beget (?Gen
(as Ceres) to begin (Gen
"beginning" as 1st as
protean
prime-ordial?

(Isis or Ishtar?)
lead me to Athena connected
"Egypt"? is, by Arachne

MER- Elizabeth "consecrated to God"
mene Semetic? Eliza El-za-beth was
MOIRA (Mary! Beth-el Jacob!

Indo-European? not pun but vector character
of words? directed magnitudes?

Charles
Ole?

(Sumerians an
earliest migration of
Phoenicians adopted
a Semetic language as As Esau (Osoos) Semetic fr Sumerian:
"Red Sea? means Red (Edon
as Philistines did? Negev

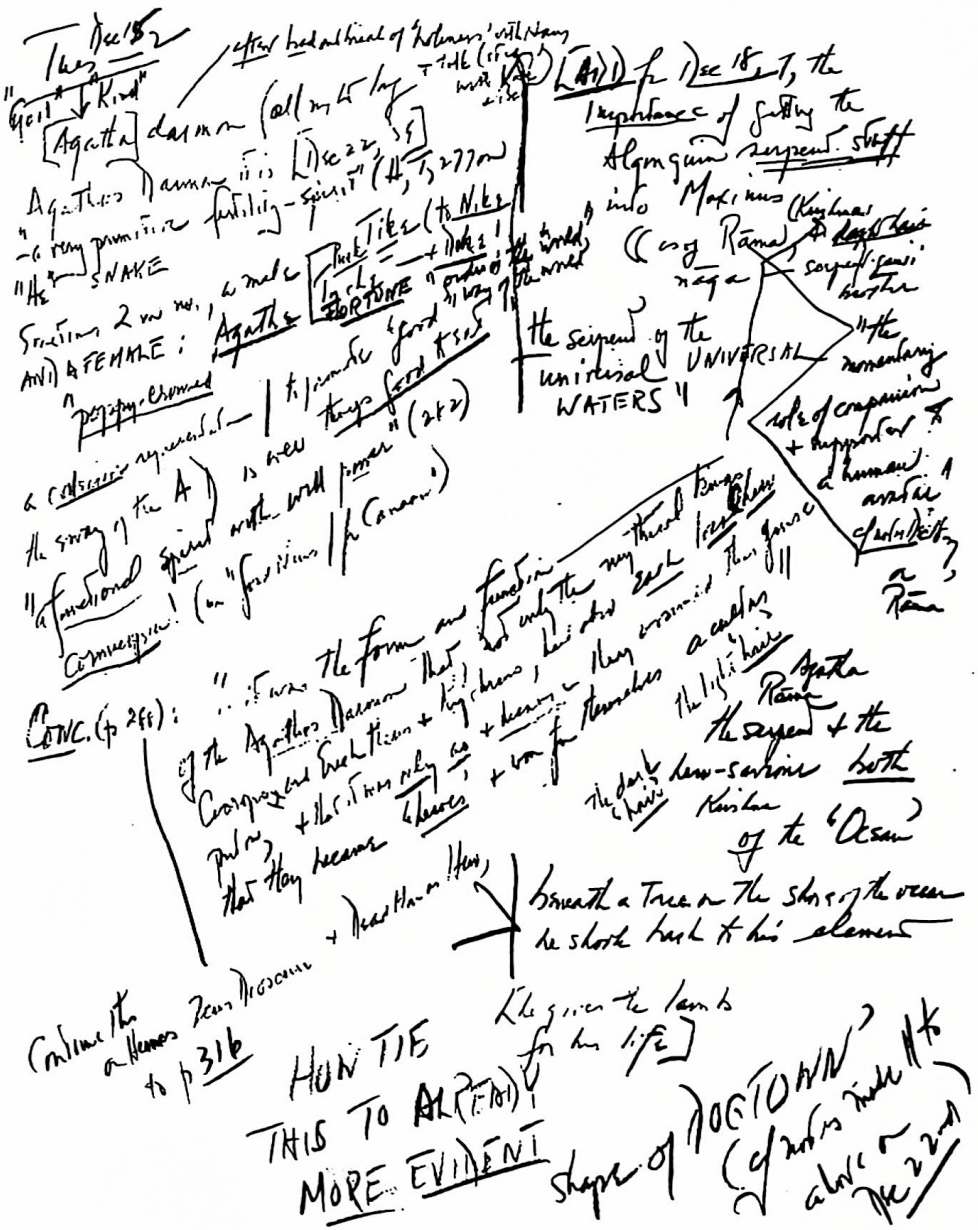
means low -Canaan low land: Gloucester Dogtown is the
sea-level opp of a horst, geologically

Shaler

I: motion from
Nominative (subject)
see meaning CHECK
in all things? (cave)
sacra: 'holy' meaning for all the binary character
from Creator on Earth Dative & the microcosm/macrocosm
Genitive
to Accusative

(object)
motion to STRIFE Enantiodromia
like participation conflict of opposites
mystique! "compulsion of libido"

Bull-
Proteus



Dec 15
Tues - 2

ADD fr Dec 18, l, the importance of getting the Algonquin serpent stuff into Maximus (Krishna's light hair as of Rama

naga - serpent genii brother

"Good" "Kind"

Agatha daimon

the momentary role of companion and supportor to a human avatar cf notes Dec 18-7, on Rama

Agathos Daimon it is
-"a very great primitive fertility-spirit" H, T, 277 on

"He" snake

sometimes 2 in one, a male Puck Tike (to Nike
AND A FEMALE: Agathe Tyche & Dike
Fortune "order of the world"
"way of the world"

the light hair

"poppy-crowned"

a collective representation to promote "good"

the dark hair

the serpent of the universal waters

the sway of the AD is ever things good to eat

"a functional spirit with will power" (282)

cornucopia! (in "Good News/fr Canaan")

Conc. (p 288): "...it was the form and function
of the Agathos Daimon that, not only the mythical kings
Cecrops and Erectheus and Kychreus, but also each local
hereo put on, and that it was only and because they
assumed this guise that they became 'heroes' and won
for themselves a cultus"

Agatha
Rama
the serpent and the hero-saviour both
Krishna
of the 'Ocean'

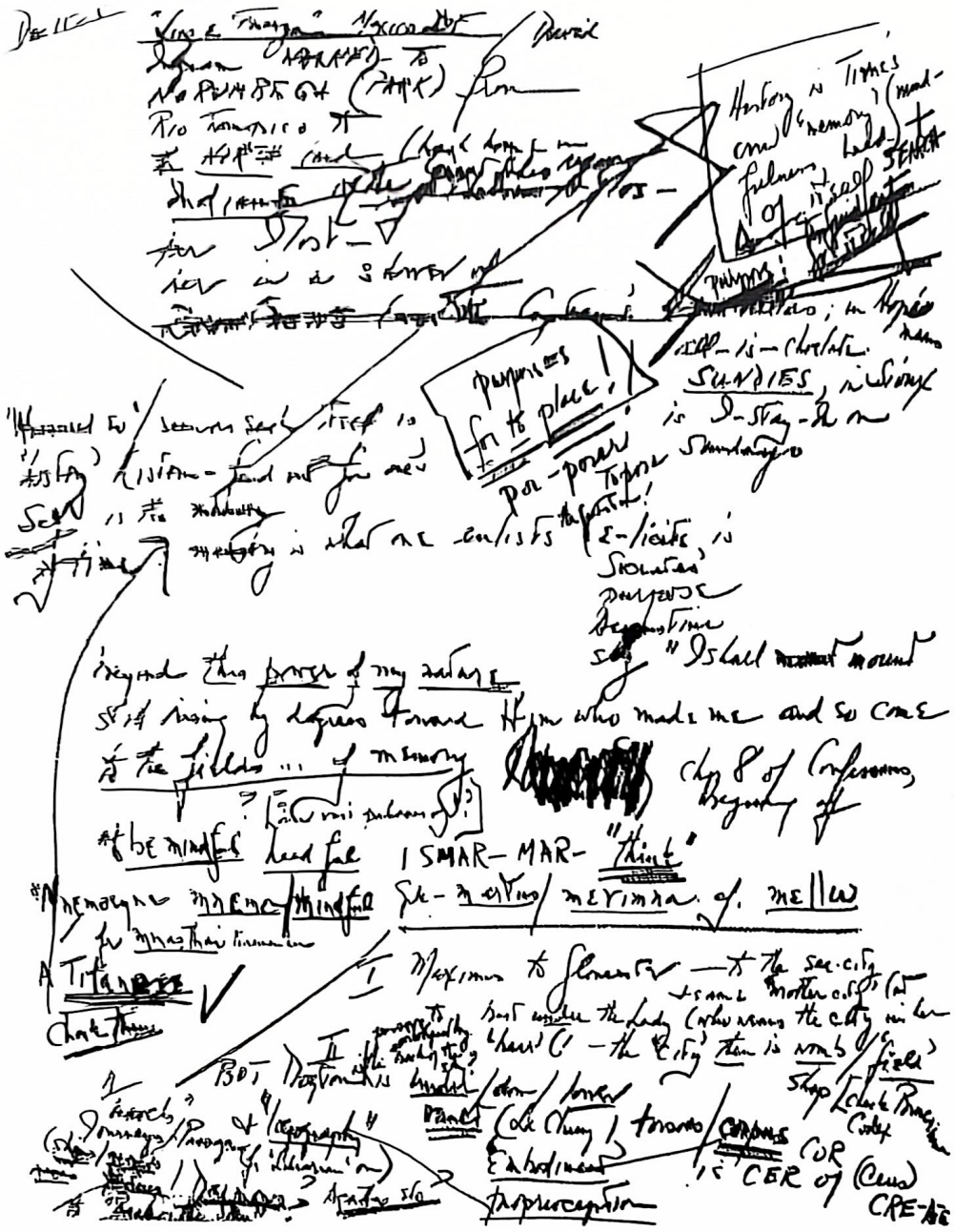
continue this
on Hermes Zeus Dioscuri and Dead Man as hero
to p 316

beneath a tree on the shore of the ocean
he shook back to his element

he gives the lamb
for his life

HOW TIE
THIS TO ALREADY
MORE EVIDENT

shape of Dogtown
(cf notes made parallel to
above on Dec 22nd)



Dec 15-5

"Luz e Fuerza" Mexico DF /David
Ingram Walker to
NO RUMBEGA (Park) from
Rio Tampico to
the North land (back home in
Indians of the Great Lakes region Gloster I lost -
her in a shower of
Champagne (was the Captain's

History is Times
one 'memory' (mind-
fulness, heed) &
of itself SEARCH
to find out
purpose: for itself
in Hopi
all-is-choclate
SUNDIES, in Sioux
is I-Stay-In on
Sundays

purpose = s
for to place!

por-poser
to pose
the question!

"Measured so"/seen as each itself is
'history' (istorin-find out for one's
Self is the memory
of time : memory is what one enlists (e-licits, is
Socrates'
purpose
Augustine sez "I shall mount
beyond the power of my nature
still rising by degrees toward Him who made me and so come
to the fields...of memory
Chp 8 of Confessions
beginning of

? "and vast palaces of"?

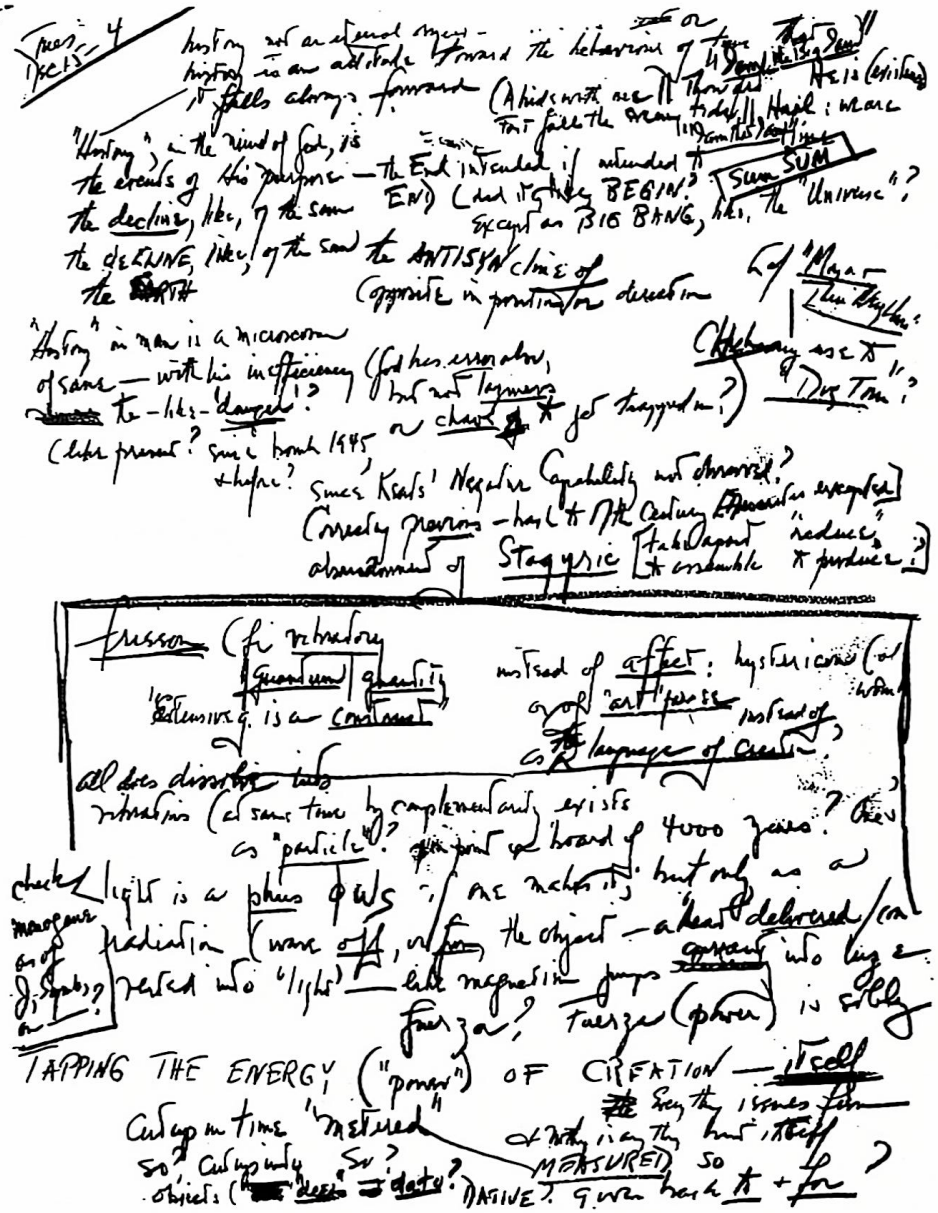
"to be mindful heedful SMAR-MAR- "think"
"Mnemosyne mnemon/mindful Grk-martus/merimna cf me

fr mnasthai to remember
A Titaness

I Maximus to Gloucester - to the sea city
& same 'mother city' (at
best under the lady (who wears the city in her
'hair' (!-the 'city' then is womb 'field'
ship

II But Dogtown is the passage to the back of the sky?
is under/down/lower
vault (La Cluny/torses/corpus cor
'Embodiment' is CER of (Ceus)
proprioception CRE-ATE

"Travels" & "logography"
Journeys/Passages (fr "Librarian" on)
(ships/grounds
races Daimones? Agatha etc?
to "Back of the sky"?



Tues
Dec 15-4

history not an eternal object - time is or
history is an attitude toward the behavior of time that
it falls always forward "I am the Big I am"

(abide with me Thou did He is (existence)
Fast falls the evening tide Hail: we are
"I am that I am" Time
"History" in the mind of God, is sum SUM
the events of His purpose - the End intended if intended to
the decline, like, of the sun END (did it, like, BEGIN?
the decline like of the sun except as BIG BANG, like the "Universe"?
the Earth the ANTISYN clime of
(opposite in position or direction

"History in man is a microcosm
of same - with his inefficiency (God has error also
the - like 'danger'? but not lazyness
like present? since bomb 1945 or chaos to get trapped in?)
& before?

Check use to
"Dogtown"?

Since Keats' Negative Capability not observed?
Correctly previous - back to 17th Century Descartes excepted
abandonment of Stagyric take apart "reduce"
to assemble to produce?

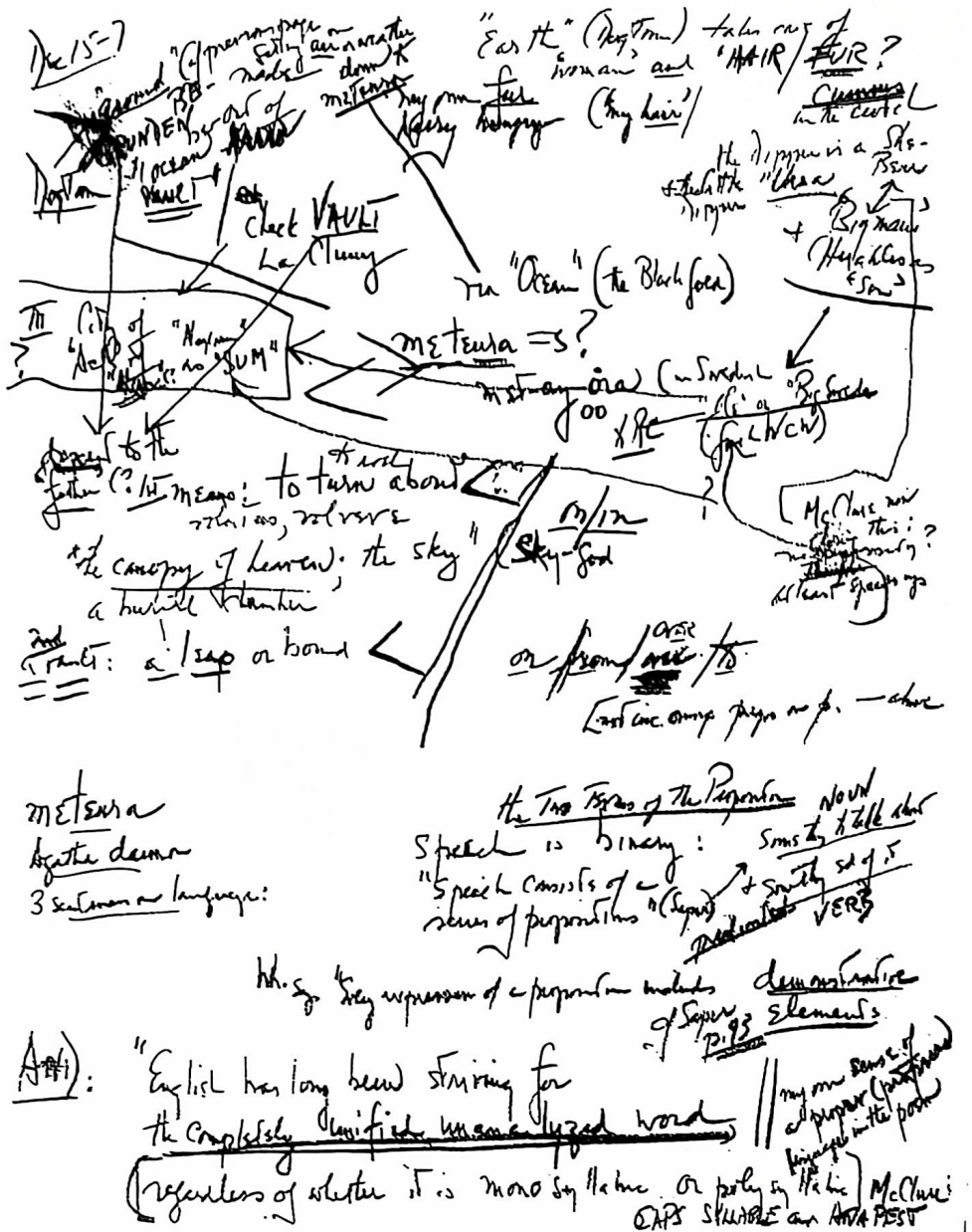
frisson (fr vibratory
quantum gravity instead of affect: hystericon (of
womb
"Extensive g. is a construct" or of "art" per se
instead of
as the language of creation?

All does dissolve into
vibrations (at same time by complementarity exists
as "particle"? pinpoint board of 4000 years? One's
light is a phus ws if one makes it; but only as a
radiation (wave off, or from the object - 'heat' delivered/con-
verted into 'light' - like magnetism jumps current into luz e
fuerza? Fuerza (power) is solely

Check
monogene
as of
J, Symb,
on ?

TAPPING THE ENERGY ("power") OF CREATION - itself

Everything issues from
& nothing is anything but itself
MEASURED so
cut up in time "metered"
so? cut up into
objects ("deeds" DATIVE? given back to & for?



Dec 15-7

"ground" (cf previous page on
Be- getting air or weather
GRUNDEN made down to
meteura

be-out of

Dogtown "ocean
vault"

"Earth" (Dogtown) takes care of
'woman' and 'HAIR/FUR?

my own fur
hairy hungry ('my hair'/

the Dipper is a She-Bear
& the little "Ursa
Dipper

Check VAULT
La Cluny

via "Ocean" (the Black Gold)

'Bigmans'
(Heracles as
'son'

III City of
? 'Acts of
"Max

"Maximus"
as "SUM"

meteura = s
met-ay-oro
oo

(in Swedish
"Ole" or Big Swede
(WCW)

descent to the
'father' (? 1st means: to turn about
volutas, volvere

to rock

McClure now
this:
at least speaks up

"the canopy of heaven; the sky"
a burial chamber

on/in
(Sky-God

2nd
a vault: a leap or bound

on/from/over/to

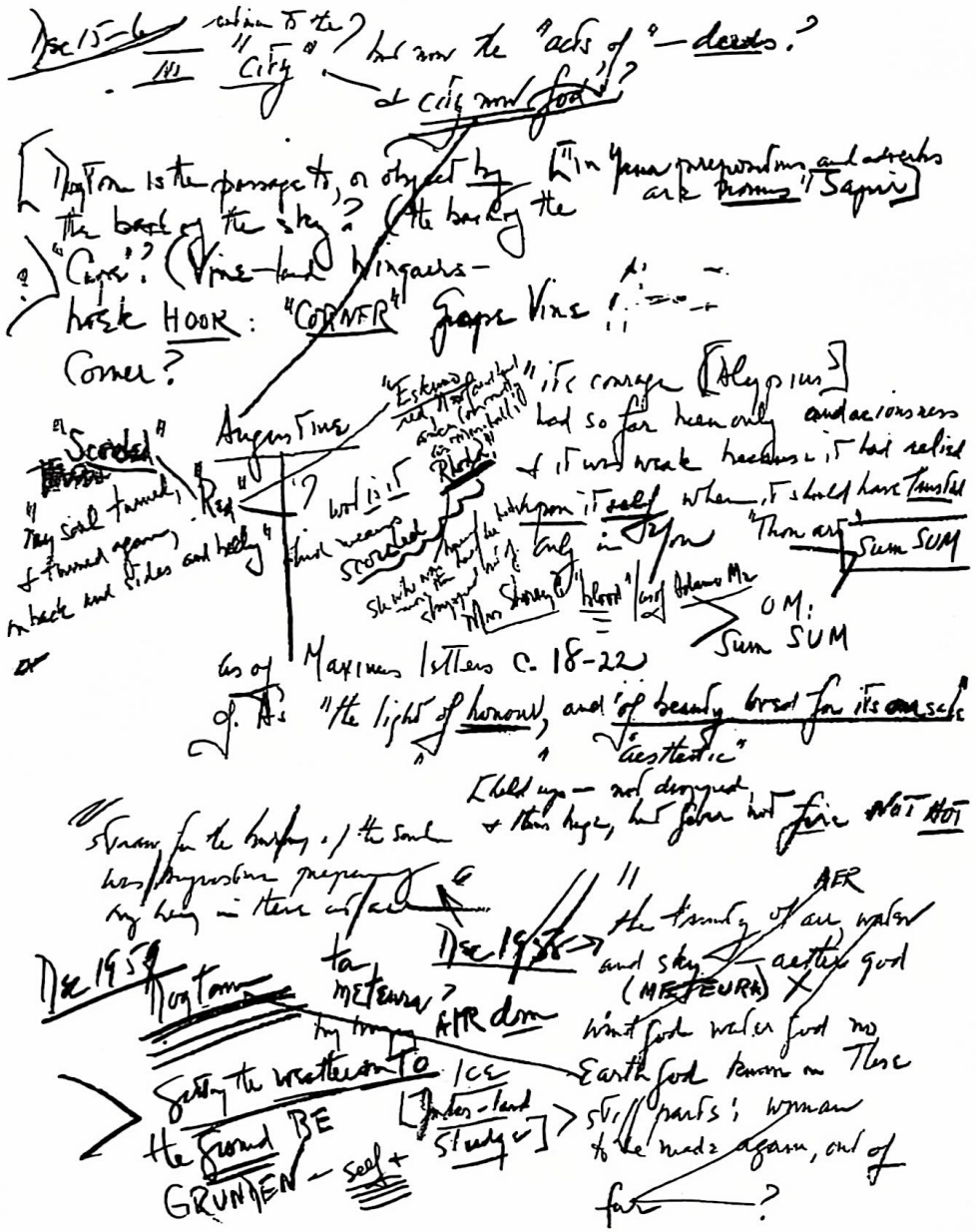
meteura
Agatha daimon
3 sentences on language:

Speech is binary:
"speech consists of a
series of prepositions" (Sapir)

"Every expression of a preposition included demonstrative
elements
cf Sapir
p. 93

AND: "English has long been striving for
the completely unified unanalyzed word,
regardless of whether it is monosyllabic or polysyllabic

McClure
CAPS syllable and Anapest



return to the
III "City"? but now the "acts of" - deeds?
& city now God's?

[Dogtown is the passage to, or object by
the back of the sky? (the back of the
"Cape"? (Vine-land ingaers-
hoek Hook: "corner" Grape Vine
Corner?

["in Yana prepositions and adverbs
are nouns" Sapir]

"Scorched Augustine

"my soul turned, "Red"
& turned again,
on back and sides and belly"

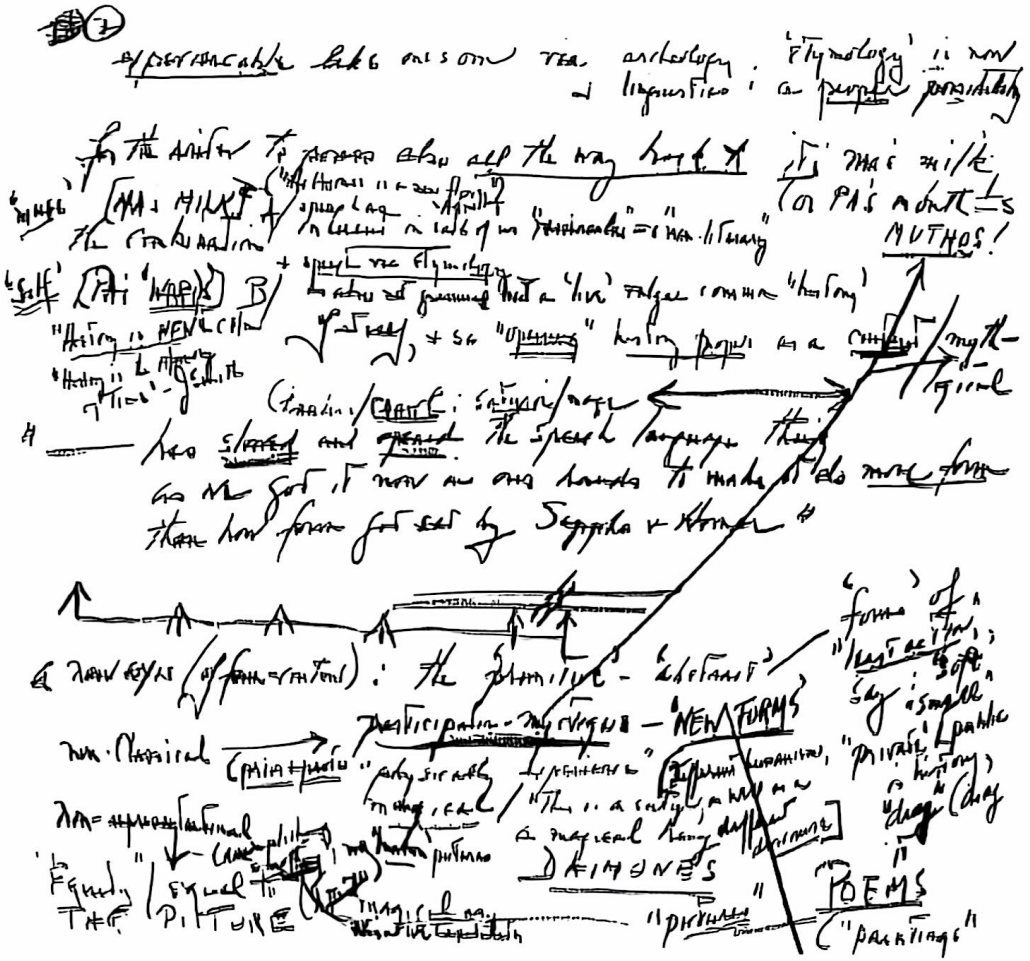
its courage
had so far been only audaciousness
& it was weak because it had relied
upon itself when it should have trusted
only in You "Thou art" sum SUM

"blood"/as of Adamo Me

OM:
Sum SUM

as of Maximus letters c. 18-22
cf. A's "the light of honour, and of beauty for its own sake"
"aesthetic"

held up - not dropped
& thus high, but fever, not fire not hot



experiencable like one's own via archeology : 'etymology' is now
& linguistics a proper possibility

for the writer to possess also all the way back to its ma's milk
(or PA's mouth = ε
MUTHOS!

'Muse' Ma's milk ("the Universe is a new flower")
—A Ginsberg

the combination A/ speech as
inherent in each of us as "vernacular" = ε "non-literary"
'Self' Pa's Words B/ & speech via etymology
as also not grammar but a 'live' vulgar common "history"
of itself, & so "opening" history proper as a content/mytho-
logical

"History is NEW"
"History is the memory
of Time"—J Smith (trahere/crawl:
"has slowed and opened the speech language thing
as we got it now in our hands to do more form
than how form got set by Sappho & Homer"

a new axis (of form-content); the 'primitive' - 'abstract'

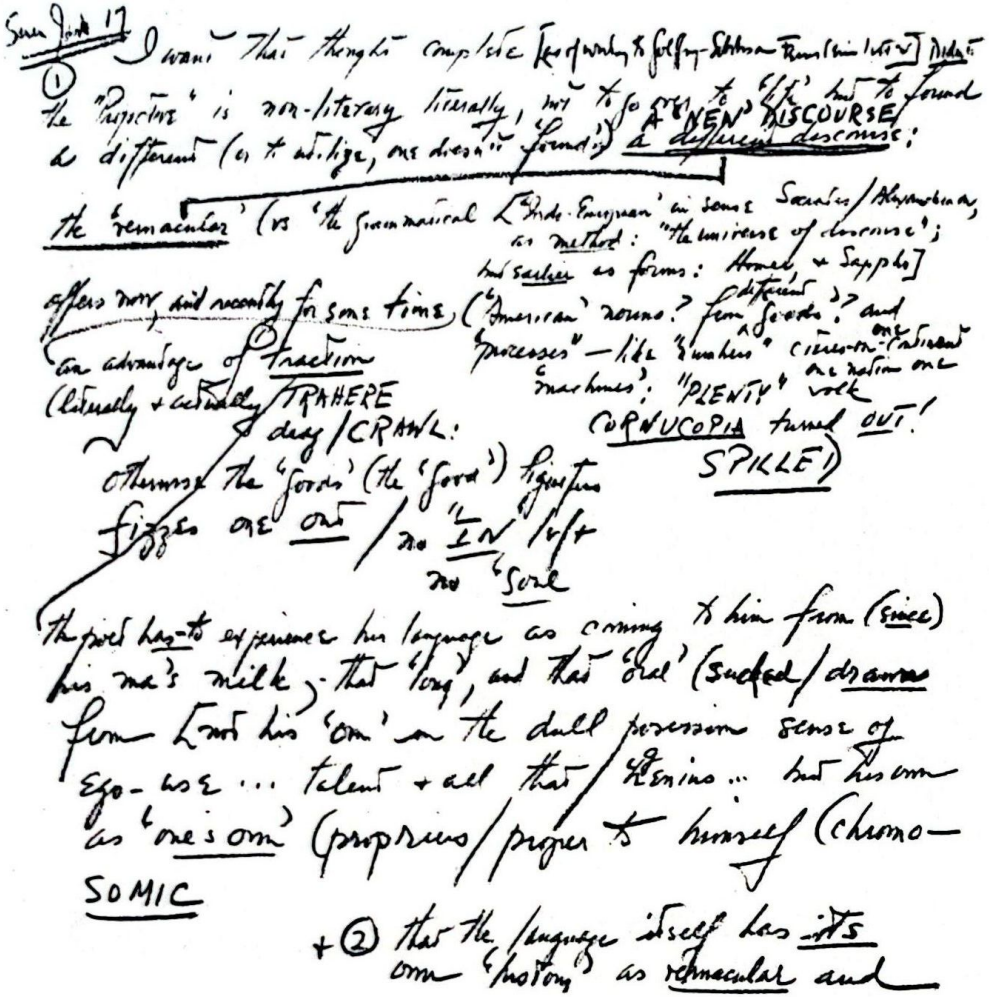
non-classical participation-mystique - 'NEW FORMS'
(prior & proto "physically experience" [different humanism
magical "This is a satyr, as well as a
a magical being different
discourse]

non-representational
(accomplishing
'nothing'; no 'known' pictures DAIMONES

Equity
Equal to (Imago) magical as "pictures"
THE PICTURE Negative Capability

'forms' of
"least action"
say: 'soft'
"small"
"private" public
is history
"drag" (drag
it

POEMS
("paintings"



Sun Jan 17

1

I want that thought complete as of writing

the "Projective" is non-literary literally, not to go over to 'life' but to found
A 'NEW' DISCOURSE

a different (or to utilize, one doesn't 'found') a different discourse:

the 'vernacular' (vs 'the grammatical' 'Indo-European' in sense Socrates/Alexandria on,
as method: "the universe of discourse":
but earlier as forms: Homer & Sappho

offers now, and recently for some time
an advantage of traction
(literally & actually TRAHERE
drag/CRAWL:
otherwise the 'goods' (the 'good')
fizzles one out/ no "IN" left
no soul

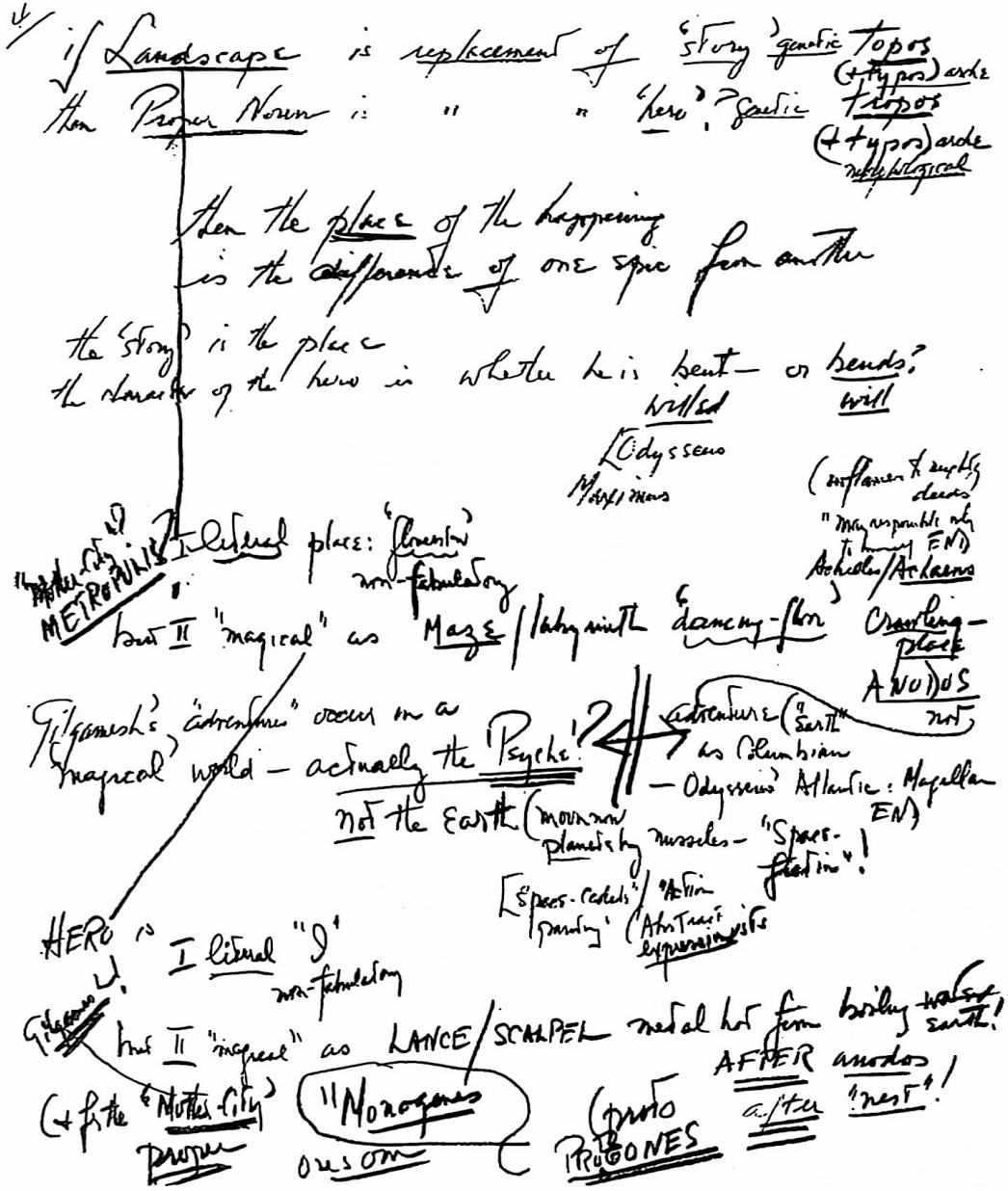
('American' nouns? from different goods? and
'processes' - like "numbers" cities on one continent
'machines': "PLENTY" one nation one volk

CORNUCOPIA TURNED OUT!

SPILLED

the poet has-to experience his language as coming to him from (since)
hs ma's milk - that 'long', and that 'oral' (sucked/drawn
from not his 'own' in the dull posession sense of
ego-use…talent & all that /hgenius…but his own
as 'one's own' (proprius/proper to himself (chromo-
SOMIC

&2 that the language itself has its
own 'history' as vernacular and



If Landscape is replacement of 'story genetic topos
(& typos) arche
then proper Noun is " 'hero'? genetic tropos
(& typos) arche
morphological

then the place of the happening
us the difference of one from another

the 'story' is the place
the character of the hero is whether he is bent— or bends?
willed will
[Odysseus
Maximus

(inflames to mighty deeds
"Man responsible only
to himself END
Achilles/Achaens

"Mother-City"?
METROPOLIS

I literal place: 'Gloucester'
non-fabulatory

but II "magical" as Maze labyrinth / 'dancing-floor' Crawling-
place
ANODOS
not adventure
("Earth"
as Columbian
—Odysseus' Atlantic: Magellan
END

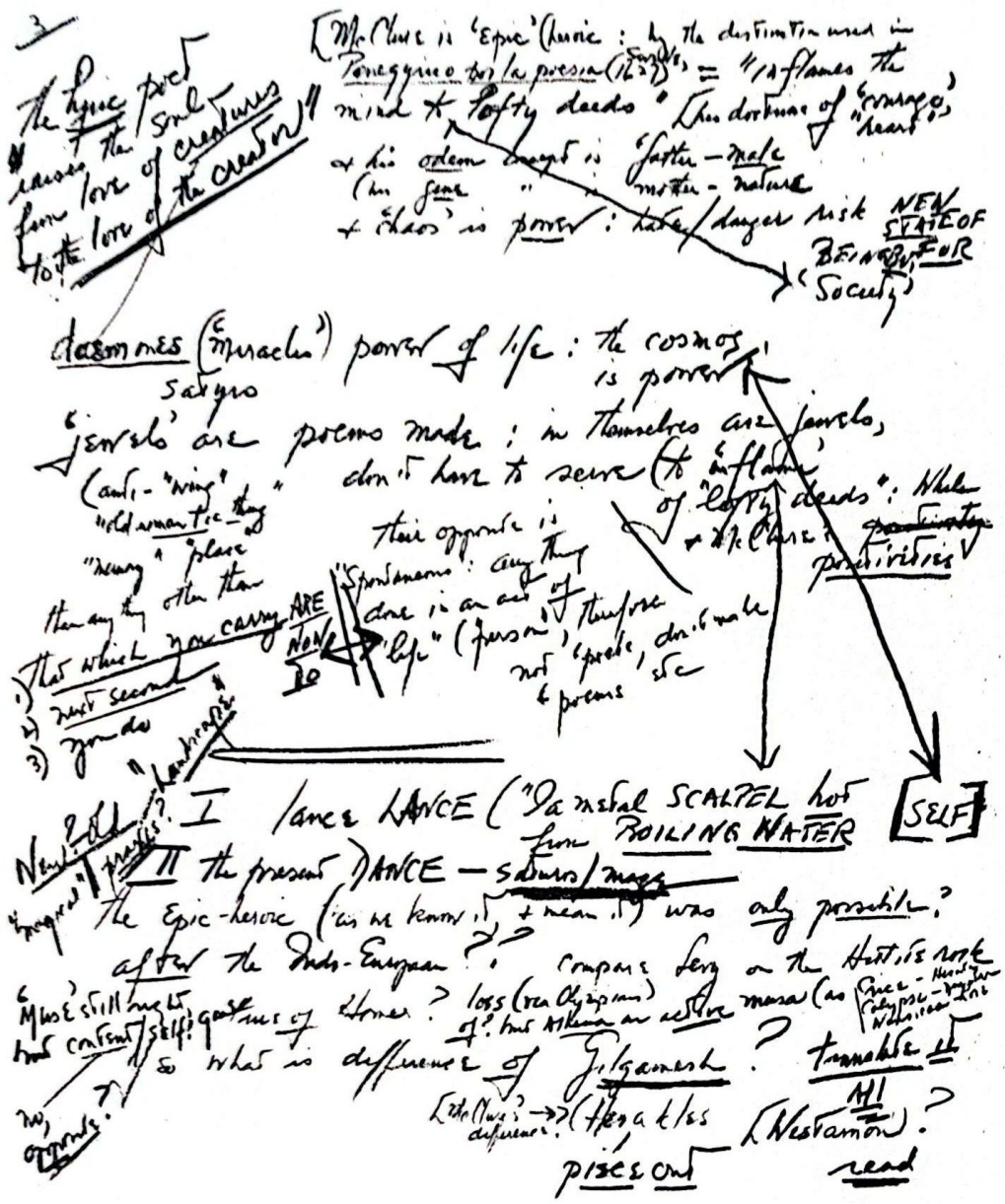
Gilgamesh's "adventures" occur in a
'magical' world-actually the 'Psyche'?
not the Earth (moon now
planets by missiles-"Space-
fiction"!

"space cadets" / "Action
painting" (Abstract
expressionists

HERO is
I literal "I"
Gilgamesh non-fabulatory
but II "magical" as LANCE/SCALPEL metal hot from boiling water
earth!

(& fr the 'Mother-City' "Monogenes
proper ones own

(proto
PROGONES AFTER anodos
after "nest"!



3

the Lyric poet
"raises the soul
from love of creatures
to the love of the creator"

McClure is 'epic' (heroic: by the distinction used in Paneggrico por la poesia (1627) "inflames the mind to lofty deeds" his doctrine of 'courage' 'heart'
& his odem concept is father-male
(his gene " is mother-nature
& 'chaos' is power: hate/danger risk New State of Being For 'Society'

daemones ('miracles') power of life: the cosmos
satyrs is power
'jewels' are poems made: in themselves are jewels
(anti-"wing" don't have to serve (to 'inflame'
"old romantic thing" of "lofty deeds": Whalen
& McClure
"memory" "place" positivities

than anything other than

			their opposite is
1)	that which you	ARE	"Spontaneous: anything
2)	next second	NOW	done is an act of
3)	you do	DO	"life" ("person" therefore
			not "poets", don't make
			'poems' etc

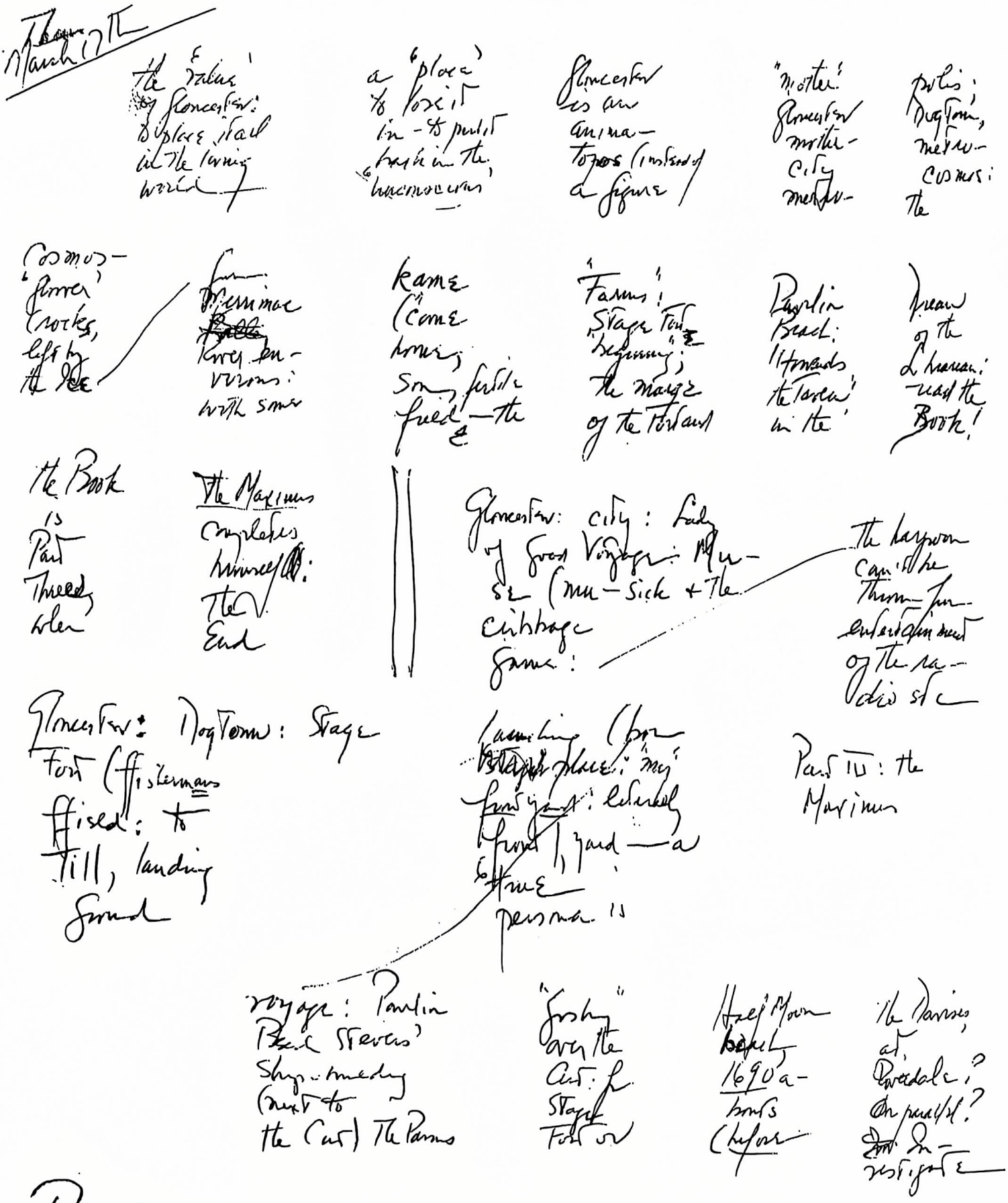
"Landscape"

NEW?-OLD
"magical" praxis? I lance LANCE ("I a metal SCALPEL hot
from BOILING WATER [SELF]

II the present DANCE - saturos/mage

the Epic-heroic (as we know it & mean it) was only possible?
after the Indo-European? compare ? on the Hittite rock

'Muse' still right
but content/self:gone time of Homer: loss(via Olympian)
of ? but Athena an active musa (as Circe Calypso Nausicaa
so what is difference of Gilgamesh?
McClure's ?(Heracles
difference
pisce out



Parsons' property something extraordinary – for Part III – as Dogtown was now for Part II // & Stevens, as "Beach", researched!

March 17th

the "value" of
Gloucester
to place it all
in the living
world

A "place"
to lose it
in-to push it
back in the
unconscious

Gloucester
is an
anima-
topos (instead of
a figure

"Mother"
Gloucester
Mother-
City
Metro

Polis
Dogtown
Metro-
Cosmos:
the

Cosmos-
"flower"
(rocks,
left by
the ice

from
Merrimac
River en-
virons:
with-

Kame
(come
home,
son, fertile
field-the

"Farms"
Stage Fort
Beginning;
the marge
of the Fort

Pavilion
Beach
"towards
the
Tavern"
in the

dream
of the
Librarian
read the
Book

the Book
is
Part
Three,
when

The Maximus
completes
himself:
The
End

Gloucester: City: Lady
of Good Voyage Mu-
se (mu-sick & the
cribbage
game:

The harpoon
can't be
thrown for
entertainment
of the ra-
dio

Gloucester: Dogtown: Stage
Fort (ffishermans

ffield: to
Till, landing
Ground

launching(
place: "my"
front yard: literally
front yard a
'true'
persona is

Part III: the
Maximus

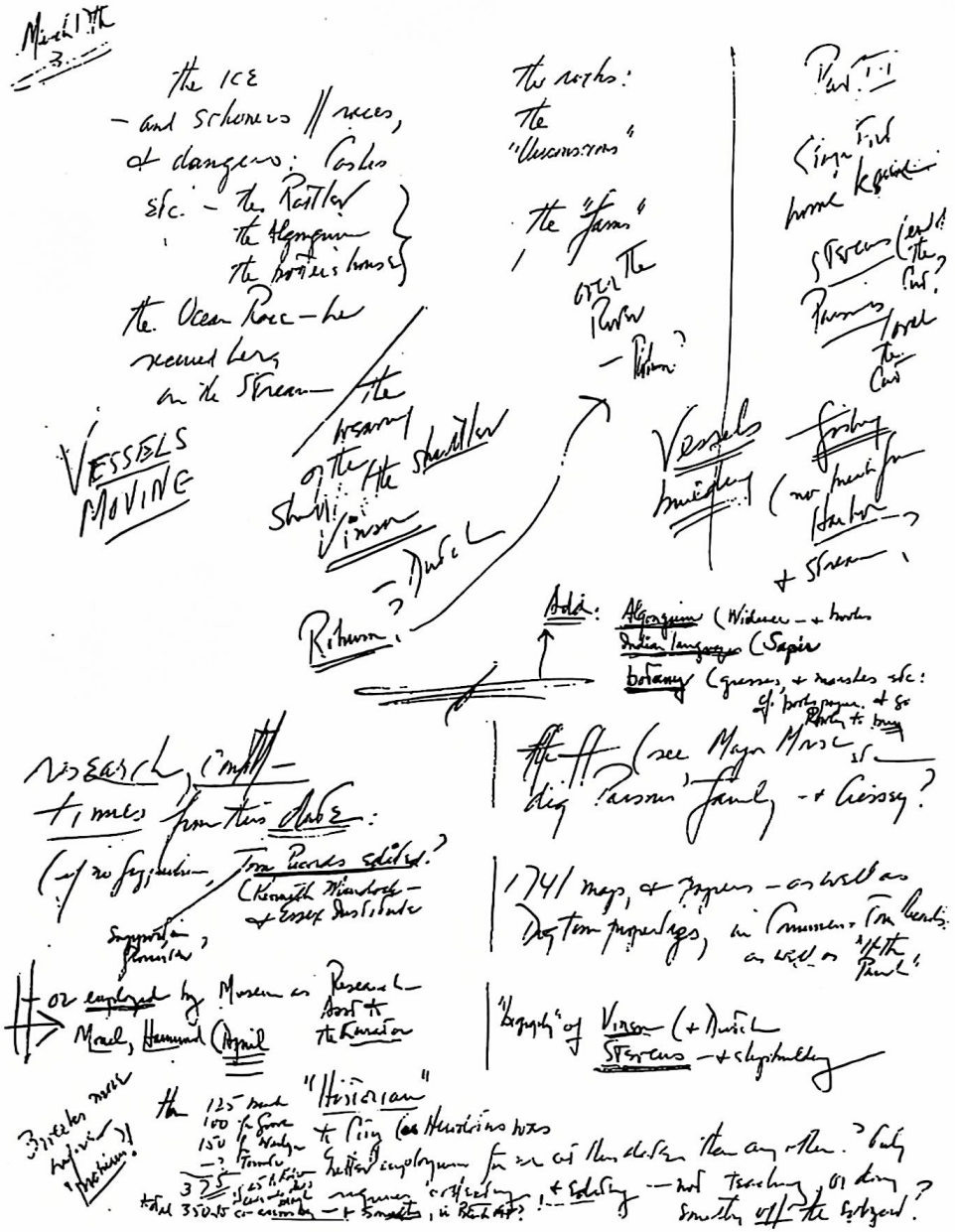
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March 17th
3

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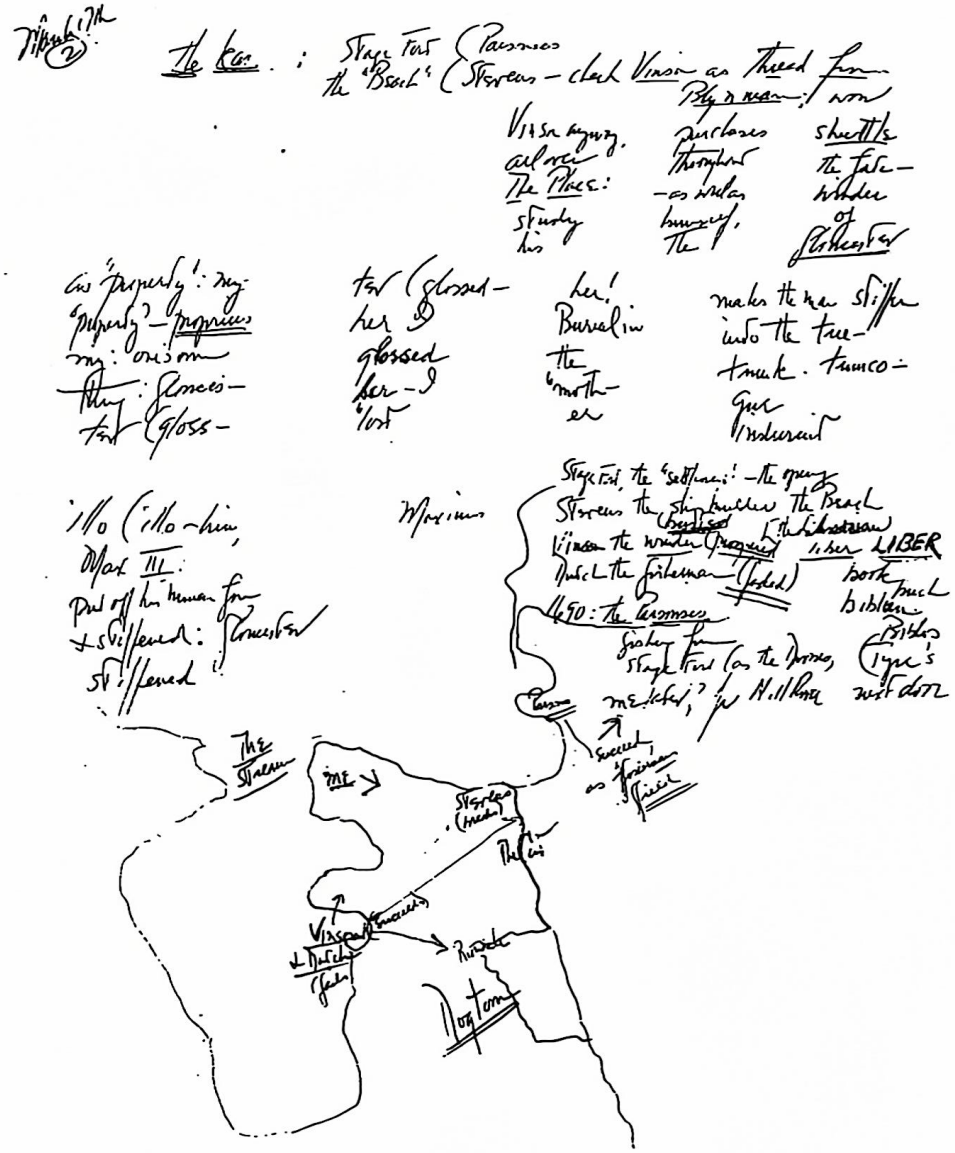
VESSELS
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dig Parsons' family -& Cressey?

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March 17th
2

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A LETTER ON OLSON AND BURKE

Sherman Paul

Olson's Push by Sherman Paul is among the first studies of Olson and is an especially sympathetic and culturally rich placement of Olson in the American tradition. Paul, like Olson, was trained in the American Studies program at Harvard, and he performs an important act of recognition, for Olson speaks from the deepest sources in American writing. Throughout his book, Paul uses the work of Kenneth Burke and concludes by referring to Burke's adaptation of the seven offices to summarize Olson's accomplishment:

> Of the seven official human offices, Olson performed especially those of teaching, giving pleasure, and consoling. For him, as has been remarked of Jane Austen, the true relation between people was pedagogic —it was chiefly in the generous way of his teaching that he gave pleasure and consolation. Such pedagogy—an antonym for demagogy?—is one of his conspicuous New England traits. Kenneth Burke... replaces "console," his initial choice for the last office, with a word that better explains its function: "pontificate; that is 'to make a bridge.' " This reminds us that Maximus, in the first instance and always a teacher, is also a Pontifex Maximus...
>
> But Olson's pontification is not of the transcending kind Burke has in mind in treating Emerson. The symbolic action of Olson's work follows the path of descendence rather than transcendence. It does not provide a bridge from here to elsewhere—to a realm beyond, higher, heavenly: transcendent... Instead it bridges down and back from here to beneath... to the ever present archaic fundament...[1]

I wrote to Sherman Paul, telling him how I had gone to Burke after reading Olson, looking for a philosophy of rhetoric and thinking Burke's scene/act ratios applied to Maximus. I wrote that Burke and Olson were especially American builders and asked him to build a bridge between them.

R.S.

[1] *Olson's Push* (Louisiana State University Press, 1978), pp. 247-248.

Cass Lake, Minn. 56633
2 June 1981

Dear Roy,

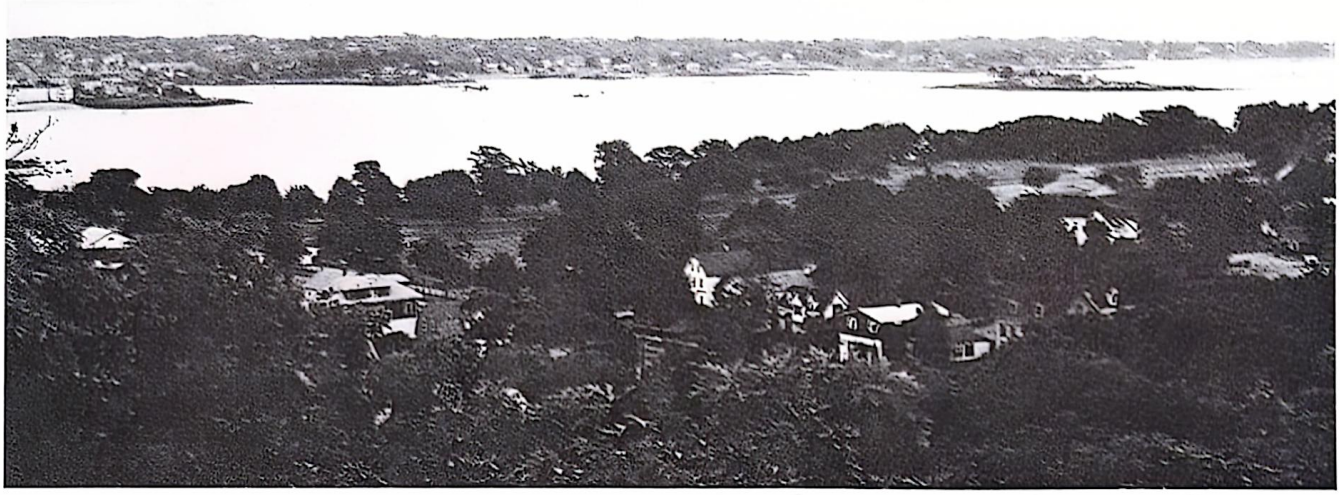
I had been forewarned by George Butterick and had already begun to ponder Burke and Olson when your letter arrived yesterday morning. We no longer get our mail delivered by boat—this is one of the new economies—and go to town maybe twice a week to get it. So now, since it is raining and I can excusably stay indoors, I'll answer you in this form, a meditative form after all, and write out what comes to mind as it comes, unaided by all the scholarly props I left behind in Iowa City. Had your deadline been less demanding, I would have waited until I returned, if only to be able to intersperse what I say with such wonderful, truly Burkean remarks as "Where there's life, it's hopeless," which reminds me that when I talked with Burke several years ago I remarked, in his spirit and very much in the spirit of his work, that his *ars poetica* was an *arse poetica*. Which recalls the salient remark of Olson about the *firmament* and the *fundament*, and reminds me how much Burke and Olson are fundamentalists.

You say that you come to Burke after Olson. It's the other way round with me. So when I wrote about Olson, that is, when I thought about him, I thought in ways, among others, that Burke had taught me, which is why it pleases me to write about him and add my testimony to the long-deserved celebration of his genius, though I acknowledged my debt to Burke in the preface to *Hart's Bridge*.

What Burke and Olson have in common (and in common with an increasing fellowship) is their sense of the crisis of the crisis of civilization: Burke, in *Counter-Statement*, seeing in the technological breakdown of the Depression something as ominous as the war he would purify by symbolic action; Olson, on the explosion of the atom bomb, taking up the vocation of poet and the undertaking—veritable symbolic action: "Man is; He acts"—of initiating another kind of nation, a *polis*, which is to say, a city worthy of belonging to Burke's *commune* cluster. (and I think now of the commune in Duncan and McGrath.) And both, of course, men of the word, answering back, countering with statement (Olson's push a counter-punch), speech itself, which we had in the beginning, our last resort; *song*, as Olson's daughter exemplifies it in *The Maximus Poems*, a form of resistance. The physiology of speech; the activity of language.

My friend Bill Rueckert, whose work on Burke is indispensable, considers Burke and Frye the preeminent literary critics of the 20th century because of the originality and thoroughness of their theoretical contributions. I appreciate the grandeur of such entelechially-achieved projects but am less concerned with systems than with the incidental practical tools they offer me, for example, Burke's "clustering." I am sure that Burke's ratios, as you suggest, apply—or can be applied—to *The Maximus Poems*; that, for all that it might lead to a spatial or static reading, one could read these poems, with considerable gain, in Burkean terms. I am sure that Maximus-Olson's journey of individuation answers to Burke's purgative-redemptive journey. I am especially tantalized (to take up your verb) by your suggestion that "O's poetics [is] a rhetoric of landscape." I wouldn't hesitate to say that it is, he himself having said in *Maximus 1* that metric is mapping and having, in his use of *projective*, a mapping term also in mind. Could it be otherwise in a poet so much concerned with our relation to space, with how to locate there, *be* there (*dwell*: Heidegger)? I have myself meditated on the following terms in respect to Olson's work: *birds, space/place, landscape, cosmicity*. My approach is neither Burkean nor systematic (coming up with a "rhetoric") but Bachelardian. Still I think you might find it useful in discovering such a rhetoric. (See *The Iowa Review*, forthcoming, 1981.)

Though I failed to say so in adopting Burke's notion of "offices" in my account of Olson, I recognize their importance in establishing the centrality and usefulness of the poet. Both Burke and Olson believe in the centrality of the poet (isn't it significant that Burke treats the offices in a discussion



Gloucester from Bond's Hill: Stage Fort (foreground), Fort Point (across harbor) Ten Pound Island (right).Photograph by Alina del Pino).

of Emerson?), though they themselves, and other poets and writers, are marginal. It has always pleased me (is it because I gravitate that way?) that Burke lives on a farm and that Olson lived in a decaying fishing port. Of course I think of Thoreau when I think of margins—he said we need a large margin to our lives, which is what we go to the margins to get, as here. But I also think of Wendell Berry who speaks of margins as a counter-theme to the dominant theme of exploitation. And I think (to praise Burke and Olson) of the counter-move of their lives in taking up voluntary poverty, and of the marginal colleges, Bennington and Black Mountain, that helped them endure it. This spring Bill Rueckert and I had a long set-to over my according Olson only three of the offices, not all of the seven. I don't have our correspondence here and can't rehearse it with the fullness Bill's argument deserves. I assured him that I did not deny Olson the full complement of offices—certainly not the political, which Bill so much insisted on—but that the ones I chose particularly characterized Olson for me. What were they? The pedagogical, the pleasure-giving, the pontificating?

What I appreciate most in Burke, to whom these offices also apply, is his comic perspective. He has the ameliorative, social attitude and the pragmatic attitude I also find in Paul Goodman—the willingness to "tinker" so that we may all "live on a little." Olson, for all of his concern with *polis*, is a poet of the cosmos, like Whitman, as Dorn shows so well in "From Gloucester Out"; but in his way, too, he is indebted to pragmatism. (Wouldn't Burke note here that *comic* is *cosmic* without the *s*?) I also appreciate Burke's humor, his playfulness, the dialectical both/and way he thinks, all of these things suggesting to me the inclusivity and openness of an open poetics, the abdication of the absolute, categorical, restrictive. Might we not read his work as a long, serial poem, the one poem a man writes all of his life? A life's work? Hasn't he taught us to look at the life and the work in this way?

I don't know if Burke influenced Olson in the way, say, that he did Ellison. I don't think Burke was one of Olson's *teachers*, like Merk and Sauer, Jung and Whitehead. Burke is not mentioned in the bibliographical remarks that punctuate Olson's letters, that remind his correspondents of the originality and groundwork of American scholarship (of "American builders," to use your good phrase). Isn't this strange considering how widely influential Burke has been and how attentive Olson was? Can we account for it? It may be that he was too readily associated with the New Critics, as he still is, mistakenly I think, in Grant Webster's *The Republic of Letters*, though considering Burke's emphasis on the *Word* there is perhaps reason for it. Then, Burke is a systematic thinker, or should I say a theoretician concerned with system, and the model of his system, the one, as we say now, that he finds paradigmatic, is logo-theological (patriarchal, the feminists would say) with emphasis on the negative (thou shalt not), the hierarchical, and victimage. I think we may gather something of the weather of our time from the fact that during a thesis examination on, among others, Burke and Hugh Duncan that I sat in on recently, the most debated issue was Burke's view of hierarchy (there are no hierarchies, Olson declares in *Maximus*) and his view of victimage, of the fact that in his system there must always be some victims, however much someone like Hugh Duncan would improve their condition or adjust them to it. Perhaps Olson would say of Burke what he said of Pound, that he was limited because he was caught in the Western box, never got outside that tradition, *back* and *outside*, as he himself did, looking for alternatives rather than an explanation (salutary as that is) of the system. Maybe their point of difference has something to do with Burke's desire to use language to purify war (any contention) and Olson's to transfer energy. I have not, as Rueckert properly instructs me to, systematically laid out Olson's thought, but I suspect that it derives from a different model than Burke's. Maybe cybernetics.

Curiously, I have been profoundly influenced by both Burke and Olson; they live compatibly in my mind. Thinking of them now, in thinking what joins them, I remember that what Olson said of Apollonius applies to them: great talkers both, who talked to live. Who thereby live.

Ever,

Sherman Paul

TELECONFERENCING, COMPUTERS, AND ART

Frank Gillette

Brendan O'Regan

Introduction: From Data Base to Knowledge Base

The cistern contains: the fountain overflows
—Blake, *The Marriage of Heaven and Hell*

First a series of benchmarks in order to situate teleconferencing:

Alfred North Whitehead once remarked that the nineteenth century was dead by the 1880s, and the 1870s was its last lush decade. One could also say that the period from 1880 to 1945 was the period in which the old Western ideologies exploded... In 1946, the first digital computer, the ENIAC, was completed at the government proving grounds in Aberdeen, Maryland, and it was soon followed by the MANIAC, the JOHNNIAC, and, within a decade, ten thousand more. Never in the history of invention has a new discovery taken hold so quickly and spread into so many areas of use as the computer... If the atom bomb proved the power of pure physics, the combination of the computer and cybernetics has opened the way to a new "social physics"—a set of techniques, through control and communication theory, to construct a *tableau entiere* for the arrangement of decisions and choices.[1]

In 1945, Vannevar Bush, President Roosevelt's wartime director of the Office of Scientific Research and Development, published an extremely foresighted article in which he predicted, among other things, the Xerox machine, the Polaroid camera, and FORTRAN. One of the items predicted was Memex, a writing, reading, filing, and communication system contained in a desk and including a screen and keyboard.[2]

Essentially, a memex is a filing system, a repository of information, and a scheme of searching and speedily finding a desired piece of information. It utilizes miniaturization, high-speed photography, memory cores such as computers embody, and provisions for the coding of items for recall, the linking of code to code to form trails, and then refinement or abandonment of trails by the machine as it learns about them. It is an extended, physical supplement for man's mind, and seeks to emulate his mind in its associative linking of items of information, and their retrieval as a result... The heart of the idea is that of associative indexing whereby a particular item is caused to select another at once and automatically. The user of the machine, as he feeds items into it, ties them together by coding to form trails.

For the usual method of retrieving an item from storage we use a process of proceeding from subclass to subclass. Thus in consulting a dictionary or an index, we follow the first letter, then the second, and so on... Practically all data retrieval in the great computers follows this method.

The brain and the memex operate on an entirely different basis. With an item in consciousness, or before one, another allied item is suggested, and the brain or the memex almost instantly jumps to the second item, which suggests a third, and so on. Thus there are built up trails of association in the memory, of brain or machine. These trails bifurcate, cross other trails, become very complex. If not used they fade out; if much used they become emphasized... Although we cannot hope to equal the speed and flexibility with which the mind follows an associative trail, it should be possible to beat the mind decisively in the permanence and clarity of the items resurrected from storage.

Here is where the ability of the digital computer to learn from its own experience... comes into play.[3]

* * *

... the geo-political tensions behind the allocation of Hertzian waves to different uses are as political as they are technical and often even the most experienced telecommunications technicians find themselves unconsciously indulging in politics.

The spectrum is the resource upon which the exploitation of all information resources (or almost all) depends. It is based upon the facility which exists in nature (and which has been explored since the last years of the last century) by which electro-magnetic energy can be made to oscillate, to move in waves, at different rates; the spectrum itself consists of the total range of possible rates of oscillation. If you stand at a particular point and a long skipping-rope is waved before you there is a constant distance between the 'crest' of each wave; this is called the 'wavelength.' But since all electro-magnetic waves travel at the same speed—186,000 miles per second—the wave peaks and troughs will occur at a higher frequency the shorter the distance between them. The longer the wavelength the lower the frequency. One cycle per second is the basic unit of measurement known as one hertz; one thousand cycles is one kilohertz, one million is one megahertz and one thousand million one gigahertz. At the smallest end of the spectrum the waves cannot be heard or seen and for the purposes of radio communication the available frequencies range from 10 kilohertz to 300 gigahertz.

For eighty years now it has been possible for man to use more and more of the spectrum for sending information and entertainment, either from point to point or in broadcast mode to general audiences. Each information device which has been developed during the twentieth century uses up more of the available frequencies and careful international organization—through the International Telecommunication Union (ITU), the world's oldest international organization, dating back to 1865—is necessary to avoid the squandering of spectrum space. Unlike other international agencies, the ITU exists only through its members, who make unanimous decisions from decade to decade on how to govern the use of this flexible resource of nature. Different devices, from radio and television to computer data sent via satellite, utilize different quantities of spectrum, or different amounts of 'bandwidth': one colour television channel, for example, uses as much bandwidth as 2,000 ordinary telephone circuits or 40 FM radio channels. The members of the ITU have gradually over the decades divided the total spectrum into bands within which specific services may be transmitted: there are twenty of these in all, including radio and television broadcasting, radio astronomy, mobile radio, point to point communications, etc.

One further world resource is interconnected with the spectrum and that is the orbit around the globe at a distance of 22,000 miles within which satellites may be 'parked' in such a way as to enable three of them to send signals to the entire world. There are already many 'sets' of satellites of this kind, known as geo-stationary satellites because at their particular height they move at the same speed as the earth. Even in the few years since space communication became possible, so many satellites have been sent up to use that particular

orbit around the earth that it is in danger of becoming cluttered. Only a handful of nations have hitherto acquired the expertise to launch satellites of their own and these and their client nations today require ever more parking spaces within this very convenient orbit.

The geo-stationary orbit and the electro-magnetic spectrum are both different from earth resources such as oil, coal or gas, in that they never run out. They are different from crops because no amount of effort on the part of mankind can increase them. In some ways they are comparable to water resources, in that mischievous or uncooperative exploitation can make them useless but they will always regenerate their usefulness if the mischief or excessive use is removed.[4]

* * *

During any manned space flight, there is data transmission of the rate of 52 kilobits per second, the equivalent of an *Encyclopedia Britannica* every minute. Between 1961 and February 1974, there were 318 days of manned space flights. How many encyclopedias does that make?

One of the greatest data collections in history to date is the 1974 Global Atmospheric Research Project (GARP) Atlantic Tropical Experiment. Sponsored by the United Nations, 4,000 persons from 72 countries used 38 ships, 13 planes, 6 satellites, 63 buoys, 1,000 land stations, and 500,000 balloons to examine an area of 29 million square miles from 1,500 meters below the ocean to the top of the atmosphere, in an area west from the Eastern Pacific to the Indian Ocean. The objective was to improve weather forecasting and to discover the sources of hurricanes, monsoons, floods, and droughts. The project collected 7,000 reels of tape and 14 billion bits of data. It will take several years to analyze the collected material.

... the jargon of information technology itself (being relatively new) is so extensive that a special English-German dictionary of 10,000 words was published in 1968 and recently updated to 15,000 items.[5]

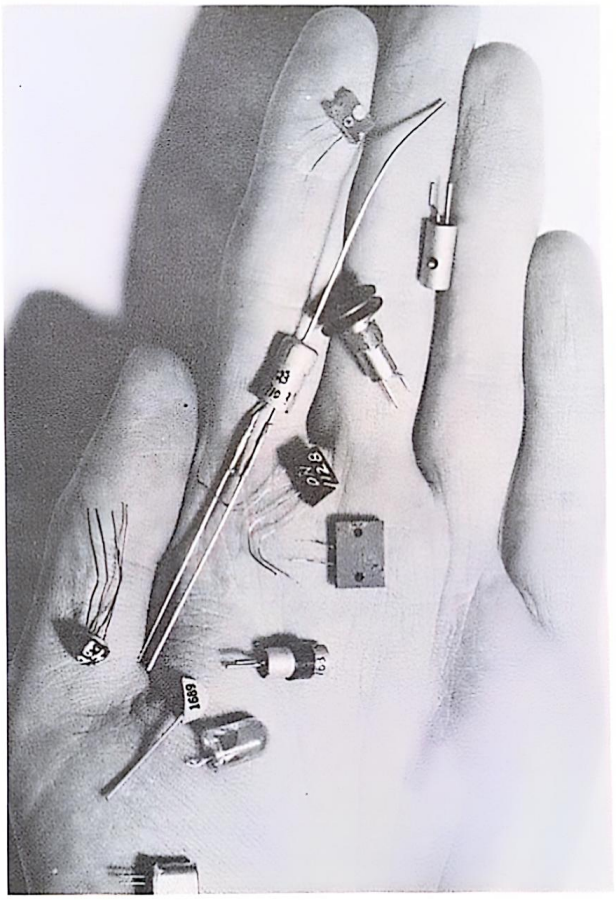
... the image of the Alexandrian Library—the single building like the *Bibliothèque National*, the British Museum, or the Library of Congress—where all the world's recorded knowledge is housed in the one building, may become a sad monument of the printed past.[6]

It is very likely that in years to come an information ring main system will be used in homes and offices rather like the electricity ring main system of today. A single circuit could supply all of the information modes which a household of the present or the future could require...[7]

In the broadest sense, the explosive upsurge of new technologies is breaking down all the older conceptions of signals, carriers, modes, and systems, and this "fusion" of information media sets the stage for a major set of social upheavals in the next several decades. These become central issues for the postindustrial society. The major one is the social organization of the new "communications" technology.[8]

* * *

Are there any "limits" to miniaturization? Anyone making predictions in 1944 would have extrapolated existing technology—that is, improving the vacuum tube—and he would have been wrong. The invention of the transistor in 1948 completely changed the entire basis of electronics. One reason why the transistor was "unforeseen" at the time was that in 1944 there was as yet no such thing as "materials science." The invention of the transistor required the refinement of a technique for preparing materials of less than a few parts per billion harmful impurities, and the utilization of special techniques to prepare highly perfect crystals.



If there is to be a next major change it may come with "integrated optics." Integrated optical circuits can be laid down in thin films in much the same way as integrated electronic circuits. These thin films, however, use miniature lasers, lenses, prisms, light switches, and light modulators. Since the frequency of light is some 10,000 times higher than the highest frequency of an electronic device, the amount of information that can be carried by a light signal is correspondingly greater. Morever, optical circuits are in principle considerably faster than electronic circuits.[9]

The clock, with its sixty pulsed seconds to the minute and the sixty phased minutes to the hour, is the symbol of the industrial economy. The computer, equally, is the time symbol of the postindustrial world. Computer time is a conceit; it is called, oddly, *real time*, which means virtually "instantaneously." *Nanoseconds* are the minutest portion of computer time. Electric signals go through computer wiring almost at the speed of light, about a thousand feet per microsecond, or one foot per nanosecond. A thousand million nanoseconds make a clock second, or about the same number of clock seconds as there are in thirty years. In the present large-size computers, it takes about fifty nanoseconds to process one "bit" of information. In that context, what is the meaning of the division of time—or of Zeno's paradox?

It is possible that we are reaching another limit of scale in technological terms. But all exponential growth reaches an *asymptote*, the ceiling limit, where it levels off. In communication around the world, we have already approached, in telephonic, radio, and television communication, real time, and the technological problems are primarily those of expanding the number of bands of communication to permit more and more people to enjoy that use.

In that fundamental sense, the space-time framework of the world *oikoumene* is now almost set.[10]

* * *

These texts were edited from the terminal print-outs of two teleconferences generated on two different computer conferencing systems. The first (from November, 1978 to February, 1979) was conducted on PLANET, the second (from January to May, 1981) on EIES. Both conferences were intended as forums to consider the possible uses of emerging electronic technologies in the production, interpretation and distribution of art. They were expected to develop texts as well as implement design and construction of museum-related events. Although each conference involved several "players" in different parts of the country, discussion was principally between artist Frank Gillette in New York and Brendan O'Regan, Director of Research of the Institute of Noetic Sciences, in San Francisco. The PLANET conference also included physician Richard Chilgren in Hawaii, David A. Ross then Curator of the University Museum, University of California, Berkeley, and the sculptor Charles Frazier. The EIES conference was sponsored by The Film and Video Department of the Whitney Museum of American Art and the Institute of Noetic Sciences, and included John G. Hanhardt, Curator of Film and Video at the Whitney, James Harithas, former Director of the Everson Museum in Syracuse, New York, and Steven Poser, a writer (trained in philosophy) who assisted Hanhardt in co-ordinating and evaluating the conference.

Each participant used a Texas Instruments Portable Memory Terminal (Silent 700 series) Model 765 which has a 20K memory capacity, i.e., it can store 20,000 bits of information in the memory element of the terminal itself, independent of the memory capacity of the teleconferencing system, to which the terminal is linked by telephone through the Telenet system. The terminal allows for composition off-line, followed by rapid transmission from the magnetic "bubble memory" of the terminal through the phone link to the computer for dissemination.

As with most advanced technology, computerized conferencing is a spin-off from developments first used by the government for military and strategic purposes:

> "Packet switching" is the use of minicomputers to break data into packets, send them by the fastest available circuits (satellites, microwave, or cable) and then reassemble the packets for the user. The system was developed by ARPA, the Advanced Research Projects Agency of the Defense Department, which developed a nationwide network of government and research-oriented computers from places like M.I.T. and Stanford, and is now available for public commercial use.[11]

ARPANET was de-classified in 1967. The actual design and implementation of computerized conferences originates in the Office of Emergency Preparedness (OEP) of the President of the United States. The first computerized system harnessed instantaneous transfer of information to conventional methods of data gathering through questionnaires, a further development of the Delphi system which soon led to "a highly innovative technique for using a computer to structure human communication for information exchange and collective effort to solve a problem."[12] EMISARI (The Emergency Management Information System and Reference Index) was the first such system; PLANET (developed at the Institute for the Future in Palo Alto, Calif.) and EIES (Electronic Information Exchange System developed by Murray Turoff at the New Jersey Institute of Technology in Newark, New Jersey) are two of the more sophisticated, flexible systems that exist today among several. PLANET and EIES structure communication into several options and modes presented as a "menu." The EIES system

> supports electronic messaging, conferencing, personal notebooks, text editing, and document preparation. It includes a multitude of specialized features such as voting, automated questionnaires, and data-gathering... EIES has five alternative human machine interfaces, from simple menus for the beginning and casual user to self-defined user commands and procedures for customized tailoring of the interface.[13]

PLANET allows participants in public conferences to exchange private one-to-one messages at the same time. Despite elimination of face-to-face cues and other kinds of kinesic context and contact, the "space" of computerized conferencing generates a complex social world with its own evolving norms, another realm of micro-sociology Gillette observes.

The history of these systems is subtly more fugitive than this summary indicates. Murray Turoff was "system designer and programming manager" in the System Evaluation Division (SED) of OEP:

> Over its six years of existence, SED's accomplishments included
> 1. The first nonlinear network optimization algorithms and programs for the construction of gas pipelines;
> 2. The first nonlinear network optimization of the Federal Telephone System;
> 3. The OEP Energy Conservation Study in 1972;
> 4. A major Delphi forecast of the steel and ferroalloy industry;
> 5. The first policy Delphi;
> 6. Delphi conferencing, computerized conferencing, and the EMISARI development.

Turoff began to collaborate, outside of channels, with Language Systems Development (LSD), a group hired to design software for OEP's computer laboratory:

> In 1968 I held a number of meetings with the Language and Systems Development people who were developing a higher-level language for the [UNIVAC] 1108 called XBASIC. Without any formal arrangements between LSD and OEP, I suggested a number of requirements and modifications to their language that would allow for the programming of communication structures, and LSD incorporated this into their design. As a result in late 1969, there was a software capability available to automate a Delphi Process.[15]

Turoff continued to develop more complex systems:

> Problems still existed with the 1108 software, one of which was that they [the OEP computer shop] could not tell who was doing what from any of their remote terminals. This was their problem, our advantage.[16]

Eventually the palace guard began to notice:

> ...the rest of OEP became aware that something was going on. This occured because the computer console operators began to talk about people from all over the country who would occasionally phone to find out some piece of information about hours and such things. This gradually filtered up the ladder until someone decided to ask what was going on... they discovered that there were a lot of people accessing its computerfrom outside theorganization and doing something with it that had not been programmed by them. They got a bit upset and conducted a complete investigation to see if government resources were being misused.[17]

At one point Turoff's computer terminal was taken away, but

he and his co-workers had allies, including the head of OEP, General Lincoln who was "one of the five statutory members of the National Security Council."[18] Turoff and Robert Kupperman, the supervisory head of SED had helped Lincoln in an interesting way which Kupperman describes:

> There was a memorandum that made an impression on Kissinger. The details are classified but it dealt with the question of should we or should we not have an ABM system. We had rather strong opinions. We had come from defense, and we know as much as anybody. We were able to put Lincoln in a useful intellectual position. Kissinger, commenting on Lincoln's memorandum, said that was foresighted.[19]

Turoff and Hiltz conclude:

> This is the organizational setting that provides the context for the emergence of EMISARI: jealousy, power struggles, rival camps in the bureaucracy engaged in internal warfare.[20]

The system proved itself useful and became part of the steering capacity in crisis management and intervention, although OEP ceased to exist:

> EMISARI...is used as the weekly reporting mechanism from the ten regions of the Federal Preparedness Agency (FPA) of the General Services Administration (GSA), a successor to OEP. Whenever the GSA has a crisis to monitor, RIMS [Resource Interruption Monitor System] is revved up to full operational status.[21]

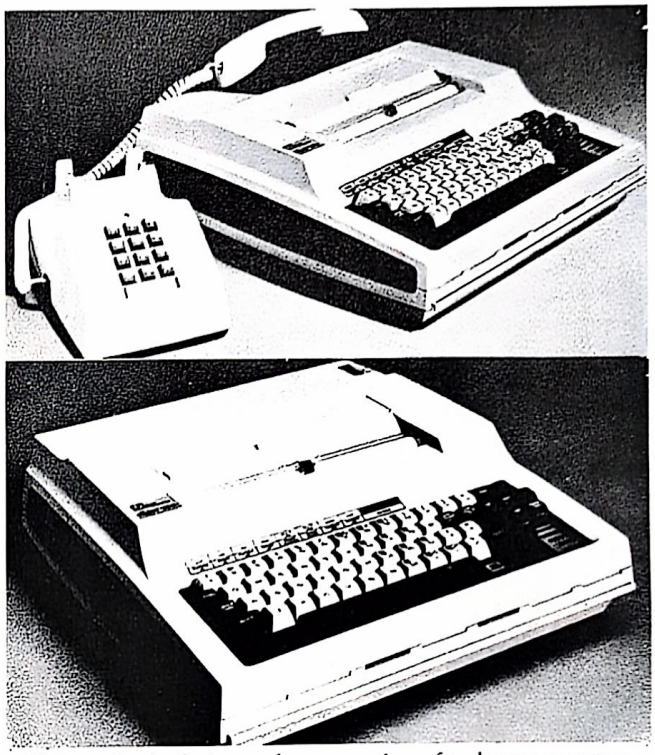
The democratic nature of entry and participation in these systems tends to shake up formal hierarchies of management and decision-making. Turoff and Hiltz speculate on the effects computerized conferencing will have on the normative set-ups and paradigm structures of research science. Planning and advocacy groups will no doubt accelerate democratic applications, complicate the steering process, alter research goals, as well as re-configure access to information. Turoff is committed to the design of non-monopoly systems which allow any sender to be an originator of information.

Commercial applications have been quickly operationalized by banks and corporations. Two examples from Smith:

> The Hewlett-Packard Corporation has already created its own internal electronic mail system which has, according to the company's own calculations, enabled it to take on orders at a far higher rate than would have been possible if it had remained totally dependent on US and other postal services. Its plants are distributed in several continents; it has 4,000 different products and hundreds of thousands of parts on its order books at any given moment. It has reduced its internal invoicing and ordering to a series of standardized sheets and an enormous volume (hundreds of thousands per day) of messages are being transferred from postal services to electronic mode.[22]

> SWIFT (Society for World Financial Information Transactions) operates daily bank clearing work in a single worldwide market and has begun to transform world money flow. It means that cash can be moved around the world with extreme speed and without any hindrance being placed through physical or legal obstacles. It holds 300,000 transactions at a time, some of considerable size, beyond all national supervision. The entire 'bank' is run on a computer which generates a kind of stateless currency, rocketing about the globe, potentially creating international currency instability as it moves.[23]

The most sophisticated transmission-links remain classified. But two corporations and one government agency are



Courtesy of Texas Instruments

collaborating in design and construction of a planetary system:

> The most important single aid to this evolution now being planned is SBS—Satellite Business Systems—a company formed by IBM, Comsat (the US communications satellite company) and Aetna Life Insurance Company. Its plans have been shrouded in discreet corporate public relations for several years, perhaps awaiting the outcome of the 1979 WARC, since its life depends upon the allocation of a suitable set of frequencies in the 12-14 gigahertz band which has been set aside for ground to satellite data links, both for direct broadcasting and fixed satellites. SBS has been 'grandfathering' a frequency in this band (squatting on it prior to allocation, in the hope that its right to continue using the frequency will be eventually conceded) since 1978...At this point SBS, firmly seated on the spectrum and capable of generating and processing a much greater volume of traffic than that afforded by US intra-corporate business will be able to move into the field of international mail and telephone connection, replacing the cumbersome unreliable services of many countries with instant and reliable communication, both on paper and in sound. The whole of filing systems of corporations around the world could be stored in IBM computers situated anywhere in the world. Where data links are presently costly and clogged with traffic between continents and across oceans they will become ridiculously cheap, by traditional standards, and plentiful.[24]

There have been remarkable applications in the realm of human services, in the sharing of medical and other specialized knowledge, and in the development of alternative learning modes. But how will artists, writers, and researchers, as well as the now problematic "general public," begin to explore the uses of these systems? How will they be marketed, institutionalized, and maintained? Bell points out there is still no national information policy. We are only beginning to explore the nature of this kind of communication. Johansen, Vallee, and Collins (the designers of PLANET) write:

> Computer-based teleconferencing is a highly cognitive medium that, in addition to providing technological advantages, promotes rationality by providing essential discipline and by filtering out affective components of communications. That is,

> computer-based teleconferencing acts as a filter, filtering out irrelevant and irrational interpersonal "noise" and enhances the communication of highly-informed "pure reason"—a quest of philosophers since ancient times.[25]

"Pure reason" is imprecise and needlessly invokes Kant who meant not axiomatic method, as these writers seem to, but the a priori structures of consciousness which constitute the sensible world as immediately given. If teleconferencing is one more step in the accelerating "retreat of the word" (George Steiner's phrase that describes the erosion of natural language use by denotative, and increasingly artificial, languages), then (following Jürgen Habermas) I would place this kind of communication within the horizon of *instrumental* reason. But these writers immediately qualify their statement and observe

> Yet, whether computer-based conferencing actually does act as a filter, even in the majority of situations, is open to question. And where it does, some may object.[26]

Turoff and Hiltz refer to Simmel's category of "the stranger" to account for the confusion of realms engendered by teleconferencing:

> The stranger is close to us, insofar as we feel between him and ourselves common features of a national, social, occupational, or generally human, nature. He is far from us, insofar as these common features extend beyond him or us... Objectivity... is a particular structure composed of distance and nearness, indifference and involvement.[27]

In the EIES conference Gillette explores this contradiction further by employing (via Talcott Parsons) Weber's polar concepts: *gemeinschaft* vs. *gesellschaft*. *Gemeinschaft* designates the affective dimensions of traditional societies, and *gesellschaft* designates the institutional, bureaucratic forms of industrial society. Habermas, reformulating Weber, distinguishes between purposive-rational action (associated with technical rules, context-free language and productive forces) and communicative action or symbolic interaction (associated with social norms, intersubjectively shared ordinary language, and emancipation).[28] Purposive-rational action is the determining form of modernization which has led to the possible transition to a "post-industrial society."

Daniel Bell writes:

> The concept "post-industrial society" emphasizes the centrality of theoretical knowledge as the axis around which new technology, economic growth and the stratification of society will be organized...
>
> [It] suggests... that there is a common core of problems, hinging largely on the relation of science to public policy, which will have to be solved by these societies.[29]

Habermas argues that the growth of theoretical knowledge itself collapses all previous forms of political and social decision-making into the routines of purposive-rational action, and he concludes that public policy debate must be returned to a re-awakened sphere of unobstructed communicative action. Teleconferencing does seem to occupy a middle ground and may become an important evolutionary tool.

The original research group that worked on the associated problems which became known later as cybernetics included two doctors, a mathematician, an electrical engineer, and a statistician. The mathematician Norbert Weiner delighted in inter-disciplinary effort to explore what he called the "no-man's land between established fields."[30] Sitting in on a class at Black Mountain College that was studying Weiner's book when it first appeared in 1948, the poet Charles Olson insisted that the only necessary investigator missing in that group was an artist. Brendan O'Regan's work in cybernetics and neuro-physiology leads him to consider the aesthetic dimensions of information, and Frank Gillette is an artist whose work in video has combined tactical use of cybernetics with acute powers of individual observation. Their dialogue explores another kind of "no-man's land" —where knowledge-bearing interests must initiate the uses of exchange in the *tableau entiere*.

R.S.

Notes

[1] Daniel Bell, *The Coming of Post-Industrial Society* (New York: Basic Books, 1973) pp. 346-347.

[2] Murray Turoff and Star Roxanne Hiltz, *The Network Nation* (Reading, Massachusetts: Addison Wesley Publishing Company, 1978) p. 63. This is the standard work on computerized conferencing. See also Art Kleiner's entry in *The New Whole Earth Catalogue;* also Jessica and Jeffrey Stamps, *On Networking* (New York: Doubleday, 1982).

[3] Vanevar Bush, *Pieces of the Action* (New York: William Morrow & Co., 1979) pp. 109-110.

[4] Anthony Smith, *The Geopolitics of Information* (New York: Oxford University Press, 1980) pp. 118-119. See B. P. Menon's review in this issue. This book is an essential summary.

[5] Daniel Bell, "Teletext and Technology," *The Winding Passage* (New York: Basic Books, 1977) p. 57.

[6] Bell, *op. cit.* p. 58.

[7] Smith, *op. cit.* p. 114.

[8] Bell, *op. cit.* p. 55.

[9] *Ibid.*, p. 37.

[10] *Ibid.*, p. 64.

[11] *Ibid.*, p. 41.

[12] Turoff and Hiltz, *op. cit.* p. 49.

[13] EIES access statement

[14] Turoff and Hiltz, *op. cit.* p. 47.

[15] *Ibid.*, p. 47.

[16] *Ibid.*, p. 47.

[17] *Ibid.*, p. 48.

[18] *Ibid.*, p. 50.

[19] *Ibid.*, p. 50.

[20] *Ibid.*, p. 51.

[21] *Ibid.*, p. 58.

[22] Smith, *op. cit.* p. 135.

[23] *Ibid.*, p. 142

[24] *Ibid.*, p. 136. WARC is the acronym for World Administrative Radio Conference.

[25] Johansen, Vallee, and Collins, "Learning the Limits of Teleconferencing: Design of a Teleconference Tutorial," quoted in Turoff and Hiltz, *op. cit.* p. 28.

[26] Turoff and Hiltz, *op. cit.* p.

[27] quoted in Turoff and Hiltz, *op. cit.* p. 28.

[28] Jürgen Habermas, "Technology and Science as 'Ideology'" in *Toward a Rational Society* (Boston: Beacon Press, 1970). See also *Knowledge and Human Interests* (Boston: Beacon Press, 1971). Trent Schroyer's essay in this issue develops arguments based on Habermas; Schroyer's essay is a distinct American development, however, with formation of specific advocacy strategies.

[29] Daniel Bell, *The Coming of Post-Industrial Society* (New York: Basic Books, 1973).

[30] Norbert Weiner, *Cybernetics* (Cambridge: MIT Press, 1948). Weiner too was sensitive to this issue, and invited anthropologists Gregory Bateson and Margaret Mead to participate in the Macy Conferences on cybernetics. Bateson was particularly attentive to aesthetics, and it is no accident that his work is used by O'Regan.

The Discourse of Teleconferencing

> By saying everything as one would write it one no longer does anything but read by speaking.
> —Jean-Jacques Rousseau, *Essays on the Origin of Language*

> You are the one who writes and the one who is written.
> —Edmond Jabès, *The Book of Questions*

> The deeper one probes into its elements, the more unexplored the language seems.
> —F. D. E. Schliermacher, *Hermeneutics: The Handwritten Manuscripts*

Computer teleconferencing is a recent technological development which establishes both a new form and means of producing and distributing a written text. In this system, keyboard terminals are joined by telephone to computers, creating teleconferencing networks. The terminal, rather than operating within the mechanical technology of the traditional typewriter or oral dimension of the telephone, embodies a post-industrial, electronic technology that generates both real time communication, and texts which can be stored in the computer, edited, retrieved, and transmitted. Teleconferencing, when operating at full potential, is a conceptual tool that may significantly alter our habits of communication. The intellectual and social "working through" of capabilities first developed within the military and scientific sectors is only now beginning. The museum is one traditionally determined place for selection, display, storage, and analysis of objects. Writing is a complex cognitive process creating a material discourse of infinite possibilities. Joining the museum context to the production of writing through teleconferencing affords radically new means of cultural exchange and documentation.

The Film and Video Department of the Whitney Museum of American Art turned to teleconferencing in order to engage these possibilities in planning for a future project that addresses the impact of the new technologies on art making and distribution. Rather than only initiating a symposium, with presentation of formal papers, we wanted to develop a preliminary telecommunications procedure for on-going work that would combine familiar and more novel elements in the production, interpretation, and display of art. This model would begin by inviting participants to explore the design of a teleconference for a specified period of time. Their experience and the information they gathered would only then be incorporated into formal presentations. A third stage would have the conferees develop their exchanges further by re-engaging the teleconference network.

In discussions on how the implications of a post-industrial culture and an emerging epistemology of information might be explored by the Film and Video Department, Frank Gillette suggested we conduct an initial teleconference as a conceptual workshop. Arranged by Brendan O'Regan, a specific conference "New Technologies and the Arts" was set up on the EIES system, and O'Regan also provided a position paper "On the Responsive Environment" to which we could respond. James Harithas and Steven Poser joined us later on. The plan was to communicate among ourselves and also possibly contact others within the total EIES system.

The capabilities of teleconferencing as a communications tool became immediately apparent in its daily operation. It is a lightweight and portable system with the terminal's access to the network as simple as dialing an access number on the phone and attaching the receiver to the terminal. The first step was to check in to see if there were any messages waiting sent by fellow conferees and then to check if anyone was currently on line using the system. After overcoming the practical problems of learning to use the terminal and the proper procedure for access codes, and coping with 'down time' when the entire system was not operational, the most immediate and profoundly engaging issue was the role time played in one's perception of teleconferencing. The teleconference was always available; it never turned off.

Its presence, therefore, began to manifest tangible temporal qualities. One could always send a message; there was always someone on line no matter what time of day, since participants were working within all time zones. Whenever one wanted to work on a text, one was accessible to others, to new messages, new dialogue, new questions. Thus time became material, shaping the discussion, however subtly, as the roll of paper provided a potentially infinite text. One changed in relation to individuals as questions went unanswered, or answered, and the linear sequence of reasoning became enmeshed in three dimensional coordinates of space and time as the printed text fused present and past (stored) times.

The body of text we have here takes more the form of a monologue than a whole multi-layered discourse. It is an expressive performance, with critical asides, within the teleconferencing system. My first hope was realized, for although we did not approach the completeness teleconferencing promises, it was an engaging learning experience. What is needed is to establish more interactive discourse that seeks in its growth a harmony of purpose, a desire to make the presence of the layered text a factor in dialogic exchange that would not only be the means for contact, but for the construction of discourse. In teleconferencing, time materializes in a series of feed-back relationships, mediated by the terminal and the total system. The dynamic of exchange in time offers the possibility of creating whole communities that may contribute a rich new layer in the archeology and history of knowledge.

I foresee as the next step in this project the establishment of a number of conferences that would be, to use a biologic metaphor, cultures of individuals linked by common interests, allowing time for small groups to understand the teleconferencing process and realize together the potential for the development of thought. In order to create such a community of discourse, the teleconferencing text must become a multidimensional semiotic of communication and information processing. The infinite teleconferencing text becomes like Freud's 'mystic writing pad,' a cultural and archeological site of a future individual, and collective, memory. As in Freud's semiotic question to a patient speaking in fragmentary phrases, "who is speaking to whom?"[1] the full potential of the semiotics of teleconferencing demands not the Levi-Straussian bricoleur, or a one-dimensional session of monologues, but a dialogic intercourse of narratives postulating the ground for a new community of texts.

—John G. Hanhardt

[1] Dean MacConnell and Janet Flower MacConnell, *The Time of the Sign* (Bloomington, Indiana: Indiana University Press, 1982) p. 11.

PLANET

[Text of Frank Gillette occupies three columns; text of Brendan O'Regan et al occupies fourth column.]

[I/1.1] Gillette

Metabasis eis allo genos

To begin with, a few propositions-definitions as to what we're up to. What follows is essentially a prologue to a "systems architecture" for the free-play of metaphor and trope. How wide a swath of collective unconscious can be cut into and re-assessed/re-stated/re-valued in re-appreciated light? All this is analogous to adaptive behavior between differing biological niches. Thus I would first distinguish *following instructions* from *obeying rules.*

Rules are formulated with regard to typical, and shared situations, since their purpose is to order and codify shared ongoing exchange activity.

Instructions are employed to prescribe certain definite performances and thus can be formulated and communicated with relative unconcern about the context within which the activity is to take place.

My experience—frustrating as it originally was—with the "instructions" for operating the computer terminal, for instance, is a prima facie case for the instructions to become unconscious in order for conscious rules to naturally emerge.

[210]

Re: the open university analogy, I can conceive of some kind of subscription which would permit the subscribing individual or institution (art institute, museum, think tank, university, gallery, etc.) to tap into the active exchange of participant signal traffic and receive summaries and update reports on the state of the game.

[211]

How effective or appropriate is the analogy drawn from Hesse's *glasperlenspiel* (the bead game)?

The meta-space of the computer exchange (the pausing, phasing, the rhythm of the waiting, the receiving, the sending, the waiting again) is formidable in part because the terminal itself is so self-unassuming—all one's perceptual habits are somehow affected by the "typewriter" look, e.g., all this meta-spatial exchange finally comes out on a single flow of two dimensions (in the strictest sense, three dimensions since paper has width) which is enough, mind you. But what it does require then is a set of constraints (contingency rules) that can be optimized in two dimensions but compatible with more dimensions and/or other flows of three or two dimensions.

Terms for description: (The work of Kenneth Burke, Michel Foucault, Ross Ashby are the resources that immediately come to mind.) A new kind of kinematic graph is what we're groping for here—a mapping of the exchange of flow—to indicate its experiential novelty.

A modal unit is what is necessary, a unit of measure, of criteria analogous to the *octave* for the musician, the arithmetician's *double*, the geometer's *circle.*

In classical aesthetics the quest is for the elementary forms of intuition. How would such equivalence of the "elementary forms of intuition" be engaged as a common pool of criteria serving the tissue of contingencies that is *play?*

The scale of a thing/process refers to the number of *distinctions* within the system described.

Scale: The distinction between identical parts is numerical. The distinction between non-identical parts is the degree, or measure, of difference.

There are parallels here to the laws of combination in geometry. The attributes of geometric space according to Poincaré are:

(1) It is continuous;
(2) It is infinite;
(3) It has three dimensions;
(4) It is homogeneous, that is to say that all its points are identical to one another;
(5) It is isotropic.

How analogous are these attributes to the meta-space or the epistemological playing field of this exchange? In a sense, these first primitive exchanges (about exchanges) are the beginnings of a natural history—complete with a future archaeology.

How do we arrive at common terms of description? For a start I would suggest distinguishing art from science. A definition of objective evidence in science is equal to the evolution of a private sensibility in art. A new mythopoetic strategy would flux between the hard ("in the metal") evidence of the world's constituted parts and the "soft" private sensibilities of individual expressions of that world.

"The substance of man is obscure to himself"—Jacques Maritain

I think the first part of this three way metalogue could be an introduction of terms. To begin to restate the sentiment and mythic-key of Genesis at the next pass in the trajecting spiral.

Much of this, I *think*, has to do with a primal sense of play and conceptual alchemy. To rearticulate the mystery and terror of "being" at all, in the belief that anything exists at all, is the first realization of difference. As existence (in the

character of human consciousness) posits non-existence, existence posits art and eternal search.

I take it that the kind of aptitude for what is called "verbal behavior" (which also includes the acquiring of symbol-systems generally, such as music, painting, sculpture, dance, etc.) can be posited as the differentia that defines us empirically as our specific kind of animal. Such "arbitrary, conventional"symbol-systems have come and gone since the days of pre-history when our kind began developing these aptitudes, the ability to do so being grounded in the body as a physiological organism. This minimum equivalent of what in metaphysics or theology would be called "mind" or "spirit" would involve a social or collective medium. Anthropologists would assign it to the realm of "culture" as distinct from "nature," though in its primitive states the two realms might not look much different from each other, as adjoining things seen from a distance seem to merge.

As our terms for images, concepts, ideas, properties, attitudes, paradigms, perspectives, situations, processes, relationships, etc. took form, they became in effect a universe of their own. Also, the mediums using these *purely symbolic* devices made possible the kinds of attention and communication that gradually led to the invention and distribution of tools (with corresponding methods and attitudes). And thus we now confront the gradual accumulation of man-made new-things that constitute what we call the institutions of "technology."

—Kenneth Burke, "Variations on 'Providence'"

Certainly, as a proposition, the division between true and false is neither arbitrary, nor modifiable, nor institutional, nor violent. Putting the question in different terms, however—asking what has been, what still is, throughout our discourse, this will to truth which has survived throughout so many centuries of our history; or if we ask what is, in its very general form, the kind of division governing our will to knowledge— then we may well discern something like a system of exclusion (historical, modifiable, institutionally constraining) in the process of development.

It is undoubtedly, a historically constituted division. For, even with the sixth century Greek poets, true discourse—in the meaningful sense—inspiring respect and terror, to which all were obliged to submit, because it held sway over all and was pronounced by men who spoke as of right, according to ritual, meted out justice and attributed to each his rightful share; it prophesied the future, not merely announcing what was going to occur, but contributing to its actual event, carrying men along with it and thus weaving itself into the fabric of fate. And yet, a century later, the highest truth no longer resided in what discourse *was,* nor in what it *did:* it lay in what was *said.* The day dawned when truth moved over from the ritualized act—potent and just— of enunciation to settle on what was enunciated itself: its meaning, its form, its object and its relation to what it referred to. A division emerged between Hesiod and Plato, separating true discourse from false; it was a new division for, henceforth, true discourse was no longer considered precious and desirable, since it had ceased to be discourse linked to the exercise of power. And so the Sophists were routed.

—Michel Foucault, *The Discourse on Language*

[199] O'Regan

Group communications among artists has never been systematically explored. Teleconferencing creates an extended space net that crosses time zones as well as cultural boundaries.

Two examples of the several forms this kind of communication could take:

1) Artist-Artist Networks: groups connected on the basis of common aesthetic interests.

2) Mentor Networks: an extension of the open-university concept wherein the possibility of "students" apprenticing to artists could be facilitated without regard to limitations of time and space. Not only would it "educate." but would also allow artists to be anywhere they choose.

[387] O'Regan
Re: 383—Cybernautics

What metaphors can there possibly be for such an activity? *Cybernautics* is an appropriate metaphor in that it distinguishes from *cybernetician* and from *cybernetics.* The activity is possessed of temporal and multi-channel qualities that seem to have parallels in Wagnerian counterpoint. Is it possible metaphors are capable of imparting richness to the referred? Here, all metaphors seem weaker than the thing itself.

[391] Ross

Introduction of any new medium necessarily results in a new field of metaphors. Here we have to deal with dialogue woven into participants' lives, not as with the hated telephone intruding into consciousness. This presents a radically new way of communicating that is genuinely novel. Our primary task is to elicit the quiddity of the medium at hand.

[396] O'Regan
Re: 383

The beast is the on-going issue and its capacity to bend all areas of discourse. We are not bombarded into the familiar landscape of full blown presence. We are deprived and enriched at the same time, hence the discovery of unfamiliar capacities.

[405] O'Regan

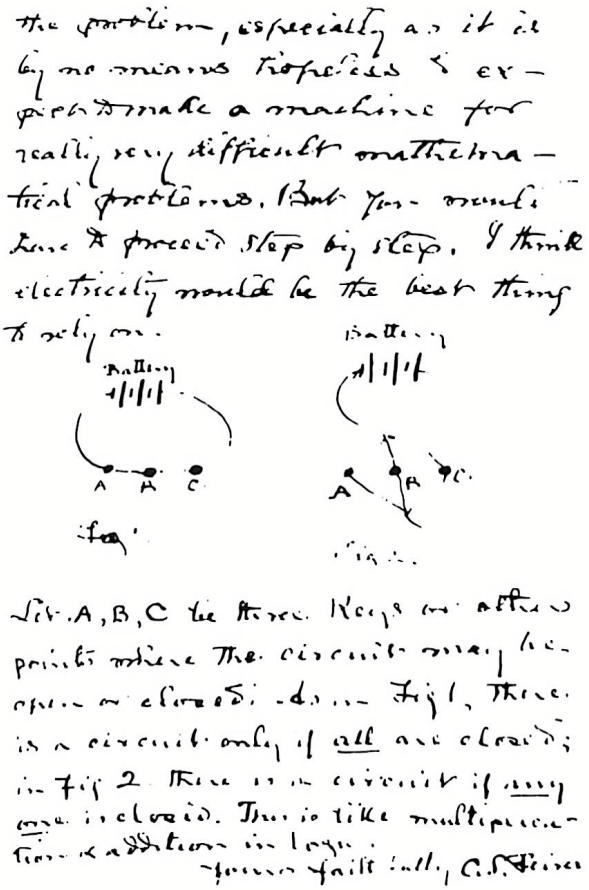
Postulate a tracking process wherein participants pursue all related lines of thought and their respective logics.

Gillette

It is also clear that many of the tests used for measuring "intelligence" are scored essentially according to the candidate's power of appropriate selection. Thus one test shows the child a common object and asks its name: out of all words the child must select the proper one. Another test asks the child how it would find a ball in a field; out of all the possible paths the child must select one of the suitable few. Thus it is not impossible that what is commonly referred to as "intellectual power" may be equivalent to "power of appropriate selection." Indeed, if a talking Black Box were to show high power of appropriate selection in such matters—so that, when given difficult problems it persistently gave correct answers—we could hardly deny that it was showing the *behavioral* equivalent of "high intelligence."

If this is so, and as we know that power of selection can be amplified, it seems to follow that intellectual power, like physical power, can be amplified. Let no one say that it cannot be done, for the gene-patterns do it every time they form a brain that grows up to be something better than the gene-pattern could have specified in detail. What is new is that we can now do it synthetically, consciously, deliberately.

—W. Ross Ashby, *An Introduction to Cybernetics*



A letter from Charles S. Peirce to his former student Allan Marquand contains the first known description of a switching circuit designed to perform logic.

[383]

Notes on generating computer argot

1. This "aesthetic" activity is fundamentally no different from any other form of problem-solving. The question now is discovering and identifying the problems to be solved.
2. One of the resources of poetic license is to liken a thing to any other thing, or to "speak" of it as another thing. In simile and metaphor a thing is assigned to a class, alloted character, and likened to things other than those implied by the system of classification built into its private logic and argot. This is the case in all language. There are no a priori limits on what or how many metaphors can be made. Players may initiate *beginnings* of an infinitely complex, integrated web of multiplying analogy, metaphor, and trope. Each is directly related to its immediate and adjacent "neighbors" but uniquely different and etiologically separate from more distant paradigms. How to make this system aesthetically tangible and coherent to an observer outside the system is the first responsibility of the players.

The raison d'être is a coherent, systematic structure directed at expanding the aesthethic-ideational range in this medium. Any attempt to impose a spurious unity (or clarity) on the parameters of interaction will elicit instead a pseudo-clarity at the expense of cutting into the marrow. At this stage of sophistication with the medium, this is the pre-dawn.

[397]

Kenneth Burke introduced the idea of "perspectives by incongruity." The unity of incongruity, I think, is "in the metal" of this system.

[401]

The simplest structure in any cybernetic/cybernautic loop is the the "kinematic" flow between three variables which are invariables in their permanence): 1. *living systems* 2. *machine systems* 3. *theoretical systems*. This is the *first* division.

[410]

I think it's something like this. Each player functions as heuristic filter generating transforms in tandem with others in identical conditions. Radially structured and non-linear, we are as collagists with the ideational debris of Western culture, engaged in *pattern creation* with the natural parameters of *this* technology read as a set of contingencies and constraints. In other words, *nature*.

[453]

This is in some ways like Eliot's concept of "difficult poetry." "First, there may be personal causes which make it impossible for a poet to express himself in any but an obscure way... Or difficulty may be due to novelty."

[547]

The beginnings of a lexicon: towards the implicit identification and regulation of time-space sequences. This spirals toward transforms unanticipated. This system, in its generalized effects, equals in scale introduction of the clock in village cultures of late Medieval Europe.

[599]

This capability (linking, say, a half dozen museums in the United States and Europe) introduces a potential for simultaneous "shows" in a meta-sensory "space." It extends the participating museum's exhibition space without acquiring a single square inch of additional real estate. The means are generated, coded and sorted in the meta-sensory system; then rendered "sensory" in "showing" space, therefore existing in *infrastructural suspension*. Possible tableaux are suspended among museums with each terminal in conformance to the players' affects. *How* this space is programmed is the issue.

I'm dubious of linking art to education, despite the justifiable implications. Their respective motivations are distinct. They are connected ceremonially, but educational benefits and evolutionary adjustments should be a consequence of this species of activity.

[879]

I think new manifestations of each of our kinesics will eventually emerge: verbal constructs replacing eye-contact, for instance.

[416] O'Regan

No one has anything but cure analogies for why synchronicity actually occurs. In truth, it does, bound by rules we rarely get the opportunity to explore. This tool provides a time-series method for generating and analysing such phenomena. I suspect such concurrences are more mediated by the right hemisphere than by the left.

[423] Ross

The implied narrative that follows the randomized sequencing of our thoughts reads as a topology of a *shared thinking experience* more like a group of dreams edited by another dreamer than anything I can reference.

[469] O'Regan

Deprivation/enrichment is that process which deprives us of normal cues. It activates the new one that we must pick up in order to get in tune with what the *others* are doing/thinking/about to type. This is the essence of the way in which the medium can serve to extend our normal capacities.

[528] Chilgren

Glossary Index:

pre-dawn

unity of incongruity

kinematic

cybernautic

tracking

transformation/order of transforms

heuristic filter

pattern creation

difficult poetry

baby talk

Finnegan's Wake

[877] Ross

It is interesting that one has to objectify parts of our face to face communication that we receive via body language of one sort or another, into the realm of the private message. When a dialogue is ongoing, I continually feel the need to contextualize my public statements with particularizing private messages, like facing a group and continually changing one's attention while speaking and listening.

[893] Ross

To quote the great Ray Johnson: "Collage or perish!"

[940] Gillette

The following "random" points are intended to serve as a radical-traditional prolegomenon for cybernautics:

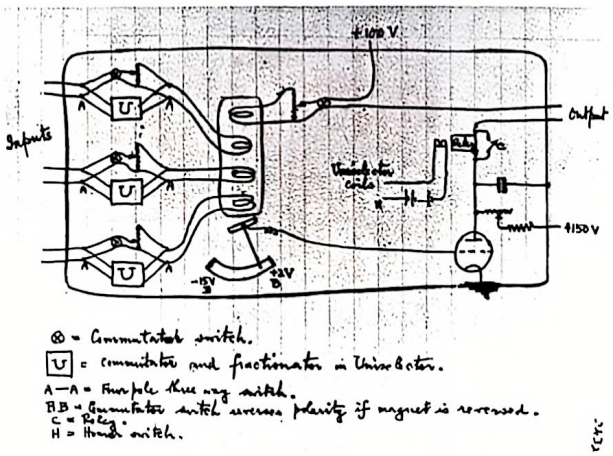
1. The teleconference is characterized as meta-theater (theater in the sense of a place of action; a field of operations) in which various methodologies employ paradox and inversion *in seriatim*.
2. What is necessary is that, in a natural variety of ways, the work embody, accord with, and represent the precise experience upon which it depends. Its "communicative" efficacy is not a separate concern, and if treated as such it would risk a fatal effect upon serious work.
3. Each player (or conferencee) represents a private "world" or perceptual/cognitive activity, the activity is displayed and demonstrated in the process, not reported. Two central questions are: How does this technological system generate its own distinct aesthetic milieu? What is the common particularity novel to the experience?

4. The teleconference can be defined as a network of multiple connections, involving complexity, order, and hierarchy. Any private world of perceptual/cognitive activity depends upon self-defined comprehension of the whole. It can function as the theater for establishing root metaphors and analogies introduced by the unique conceptual pressures encountered in the teleconference itself. For instance, adapting ordinary language, in addition to various specialist lexicons and argots, to the novel purposes of this activity. For instance, translating certain mythical forces from their lost redemptive power to a redefined descriptive power.
5. Taking off from the physicist Margenau's concept of the "Requirement of Multiple Connections" the premise is that through their definitions, constructs enter into relations with each other. The interest here leaves aside, at least for the moment, the origin and focuses on the character of the connections which constructs may enter (each conferencee represents a constellation of *such* constructs). These may be of two types, *formal* and *epistemic*.
5.1 A formal connection is one which sets a construct in a purely logical relation with another construct (construct can be read here as any message which defines a distinct point of view). They are in a sense hypothetical judgements. Classic examples of formal connections: a) the relations between geometric quantities and their axiomatic sources, or b) between the golden mean and its expression in a particular set of angles in a picture plane. One peculiarity of formal connections is that their formal character becomes less obvious (even transparent) when and if they are empirically verified.
5.2 An epistemic connection is equivalent to and arises from a rule of correspondence which links the construct with data or evidence. Examples of epistemic connection: a) the relation between a tree and the perception of it b) between a force and an awareness of muscular exertion. One of the terms is a construct, the other is in nature. Connections are also both formal and epistemic in equal degree, as in any graduated experience, from empirical to ideational and back.
6. The divisions of formal and epistemic can be applied to the ordering of messages exchanged in this system. In some sense a new distinction between art and science may be defined when each is considered as a mental domain in the search of descriptive modes. To do so also raises questions as to the validity of the standard distinction of objective and subjective. For example, absorption in the immediacy of perception/cognition is generally recognized as an essential characteristic of art, whereas the instrumental use of perceptions to infer and confirm theories is the typical mark of science. This system of exchange and hypothesis has the potential of synthesizing these two distinguishing attitudes.
7. The teleconference can be said to have a metabolism of its own. A sort of optimum harmony of processes in exchange and synthesis achieving possible tiers of novelty with discontinuous "quantum" shifts establishing essential internal divisions.

[970]

In regard to Brendan's trinity of modes (with its implicit critique of certain Wittgensteinian techniques)—a re-working of standard "living" descriptive vocabularies (aesthetic, scientific, mystical, logico-mathematic, etc.) can do more for a fresh comprehension of the "curious impending overall synthesis." *This* is in the core of the matter. The exchange activity itself is either an activity resistant to definition or an activity extremely tolerant of definition, absorbing and transferring these into its own substance. The specter of failing at maintaining this inverse and paradoxical harmony of resistance to definition and wild tolerance of definition is in a line from Wallace Stevens: "Sentimentality is a failure of feeling."

As for Brendan's "delicious infection"—I would (driven as it drives me) draw on, in full flush of reference, my very last Kierkegaard: "The individual becomes conscious of himself as being this particular individual with particular gifts, tendencies, impulses, passions, under the influence of a particular environment, as a particular product of his milieu. He who becomes thus conscious of himself assumes all this as part of his own responsibility. At the moment of choice he is thus in complete isolation, for he withdraws from his surroundings; and yet he is in complete continuity, for he chooses himself as product; and this choice is a free choice, so that we might even say, when he chooses himself as product, that he is producing himself."



A diagram of "automatic homeostat" from the notebooks of W. Ross Ashby which he later used in *Design for a Brain*.

I submit the following as entries in the glossary for this exchange. The connections between these words stem from intuitive contagion, and not necessarily a strict adherence to formal definition. They are essentials (in the cybernetic sense) as transferable to cybernautic activity.

message: composed of various ratios of information and noise.

feedback: positive, in order to expand deviation in a given system performance, and negative in order to restrict deviation or maintain a steady state.

homeostasis

redundancy

"redundancy of potential command"

continuous and discrete

euphony

cacophony

fecundity

chaos

incoherence/triviality

proto-responsibility

[978]

Brendan on 940—As to the appropriateness of "paradox" and "inversion" (from as classic a source as the Bible no less) is the correlation between two distinct remarks. Genesis: "...In the beginning was the word." And the apostle John: "...and the word was made flesh." This is the stuff of paradox and inversion, especially when you consider the ratio of letters in most alphabets (22-26) and the chromosome ratio in genes (21-26). This may be an extreme range and may include fictional documentation, but it is appropriate enough.

[963] O'Regan
Re: 940

1. Yes, teleconference as meta-theater. Any methodology is employed so that communication occurs *in* this medium. How do the terms "paradox" and "inversion" attach to specific modes of operation?

2. Where is the tautology here? We only go so far with the problem of a system describing itself. I am reminded of an old question in brain research: what are the limits of a system in terms of understanding itself? This point of view pre-supposes identity of mind and brain.

3. This is differently *distributed kind of intelligence,* different from almost any found in nature. One of the most novel particularities of this system is the existence of exponential channels of simultaneously operating dialogues. Our task will be to use, characterize, stimulate and display parallel-processing modes.

4. *Complexity, order, and hierachy:* These three terms are minimal coordinates by which one defines simultaneity in the system. All three become involved, as the "themes" of any conference emerge, in addition to layers of sub-themes, some of which recur as others disappear. In the piece to date, the initial theme has been/is the piece itself, with the house-keeping theme of *how* to support it institutionally and financially. Various sub-themes have emerged and would be interesting to analyse, particularly time-lapse events. Multiple participation on several channels is a necessary threshold through which to pass in order to properly use the system.

5. The system abounds in formal connections, which are mostly transparent. Hence the difficulty in describing them or in not simply obliterating their significance by succession. I submit that this terrain is virtually devoid of metaphor.

6. *Immediate and/or remote perception:* This is one of the keys to the system. All the things we can think of applying the system to at this stage have probably already been done by conventional means. Depending on the order of complexity generated, we may arrive at new forms by linking this system for a new purpose.

[965] O'Regan
On Being Formal—The Virtues of the Opaque in Times of Immediacy

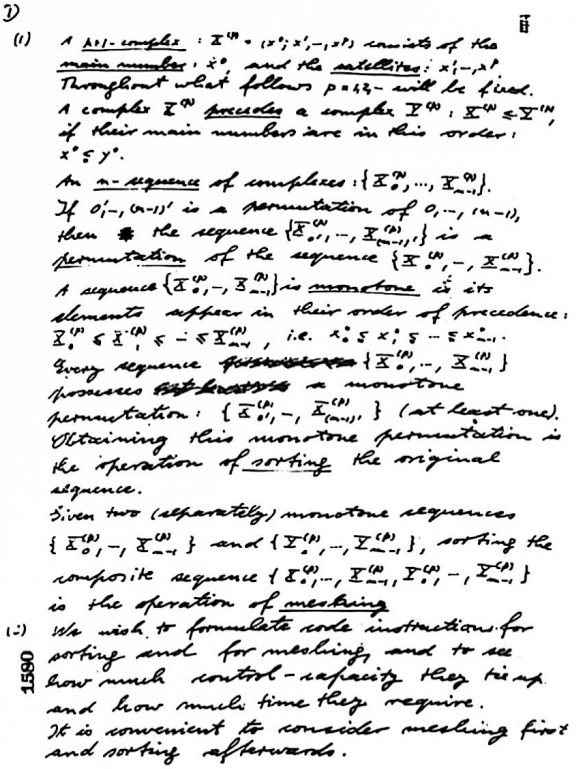
In discerning the nature of inter-communicational forms in the medium of teleconferencing, it is necessary to distinguish three basic modes. These are:

The Formal Communication:

The tortuous path, referenced and annotated, serves to stimulate the indigestibility of the formal mode. It is, nevertheless, the mode of considered substance, no matter how stilted it may seem upon recall. It is also the stuff of legend and synthesis, all of which matter to the *modus operandi* of genius at work. We have all been victims of this delicious infection. Even now I can hardly resist a reference or two myself!

The Live Communication Mode:

It is serially exhilerating to a degree unexpected in advance of the experience. There is the sense of quadrophonic logic, stage whispers, asides (!) not in the script—the excitement of interchange, the challenge of response, the *threat* of real time.



The first page of the first program written for a modern computer. Von Neumann illustrated versatility of the new machine by coding an operation central to business applications-sorting. He illustrated that program step by step in an appendix to his June 30, 1945, report on the design of EDVAC.

[1187] Gillette

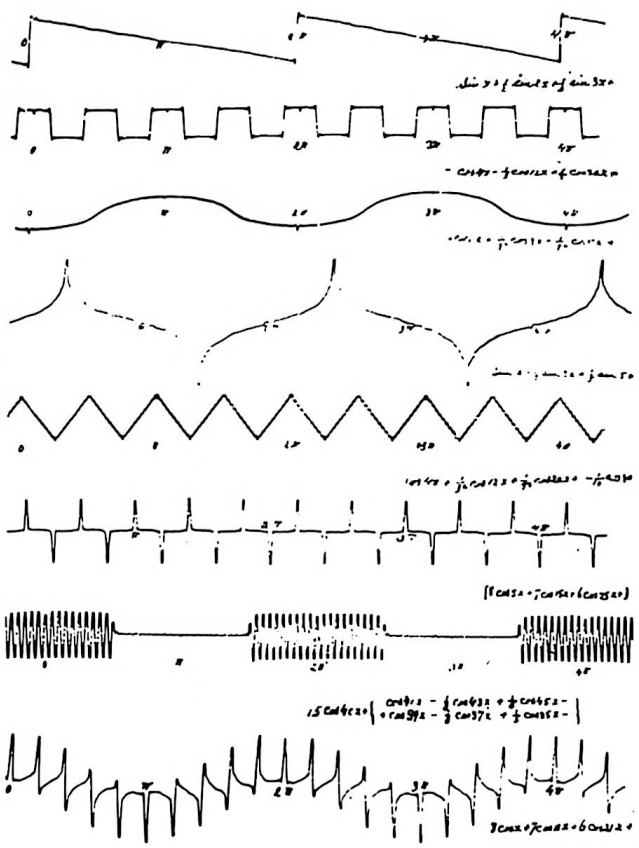
Art said Zola is a "corner of *Nature* seen through a temperament." We have a "field" of temperaments (variously programmed) defining a spread of association and lateral interconnection. Each temperament is amply supplied with its own endemic assumptions and intellectual habits bred by unique and peculiar methods and requirements.

Among them, in this case, is a susceptibility to a kind of metaphysical pathos, but all this is self-conscious prologue to what follows (in part a response to Dator's remarks on the status of Western science and the role of synthesis in actively generating unexpected paradigms from ancient traditions, art, science, technology, poetic speculation, fiction, politics).

1. Randomly the premise begins with the concept of *resonance* in form and in information. In *art* it is grounded in the quality of objective replica of the subjective (the privately felt). In *science,* the activity of replication equates with access to the structure of the thing itself, regardless of its division between subjective (privately validated) and objective (consensually validated) associations.
2. Science is associated with repeatable abstract operations and their consequent logical reasoning, while art is the articulation—the perennial restatement—of experience through *sensory* observation. The issue is to further distinguish these separate ways of knowing, with their respective attributes keying the opposing essentials towards the evolution of heterogeneity.
3. Paraphrasing Darwin—from an incoherent homogeneity to a coherent (paradoxically integrated) heterogeneity.
4. *Providing freedom from blind instinct.*
5. Paraphrasing the classical criteria of evolutionary change—descent with adaptive modification and origination of new types. *Type* is employed as the strategic pattern of *individuals.*
6. The pressure of constant modification effects differently the choice of "mode" and its subsequent methods. For example, in art: the evolution in sculpture through modification from Myron to Praxiteles. In painting, from Giotto through Raphael to Veronese. You cannot discuss these respective lines of development without, consciously or otherwise, commenting on certain aspects and attributes of, respectively, the Greek and Italian cultures of their times. The pressures of modification emerge from the outside to effect the eternal interior of subjective *form.* In science, there is, significantly, much less of this in the truths it articulates, they being somewhat immune to the context of specific cultures (Lysenko not withstanding), i.e., they are in some sense meta-cultural truths. Art (and its evolutions, senses, processes) is always imbedded deeply in its cultural conditions as it is effected and directed by specific individuals. Think of Galileo's problem of coaxing the Vatican to peer into his scope and observe the "impure" moons of Jupiter.
7. Art lives off the presence of paradox, and science strives to eradicate it. But paradox is illusive and subtle and moves elsewhere, like the writing finger, showing up in the most unexpected places without an alibi or sense of restraint. Hence the eternal dynamic of science.
8. In the highest expression of *art* the paradox is converted into a quality of mystery or awe or even enthusiastic wonderment (as in Blake, Rousseau, Rimbaud, and Whitman). From the opposite side (according to Aldous Huxley) all art begins "with each artist" while science is externally dependent upon the evolution of evidence. Quantum changes in *art* are of a different internal character than science.
9. From the perspective of the Nominalist, an art (or Art) can have no existence apart from its concrete embodiments drawn from the receptacle of traits by which it is defined.

[1201]

Science, concerned with processes and "processing" is not properly concerned with substance (that is, it is not concerned with "being" as poetics and certain strains of art are). Hence, it need not be concerend with motivation. All I need know is *correlation.* The limits of science, *qua science,* do not go beyond the statement that, when certain conditions are met, certain new conditions may be expected to follow. In art, motivation is imbedded in discontinuity—conditions be damned.



Curves drawn by the eighty element harmonic analyzer designed by A.A. Michelson and S.W. Stratton. This is an application of Fourier's principle of harmonic analysis. Roughly speaking, he proved that any continuous curve, no matter how irregular, can be approximated by adding together a number of simple regular curves.

[1000]

This is the millenium message, in pursuit of the millenial, poised with dispatch and referential clarity to resist all attenuation of mystery resulting from the shibbolith of our epoch: the drive toward the cosmic "quick fix."

Energy is eternal delight

The Polite Interim Response Mode:

But what to do when called to the cry of the hunt? Etc. Or at the arrival of ten feet of Wittgensteinian condensation? The polite–interim response mode allows the receiver to punctuate the sender's demand with a holding pattern and absorb the urgent message.

[976] O'Regan

Gloss on glossary: I think we should derive the terms from further down the line. Maybe the day will come when the fecundity of my cacophony will lead away from chaos and incoherence/triviality and toward the great goddess of proto-responsibility.

[981] O'Regan

On language/inversion/paradox: in the Hawaiian vocabulary there are 33 different ways to indicate a cloud, 179 terms about sweet potato alone, 225 words about the taro plant from which poi is made!

[991] O'Regan

Issue alert! Message 1000 is approaching, a first time with me on this system.

[1001] O'Regan

As 1001, I am glad the computer does count beyond 999. We never went this high in any conference before. Thus we didn't know what it was programmed to actually do: play Beethoven, a Mexican Samba, or an Irish jig.

[1005] O'Regan

I'm here in Honolulu with Jim Dator, head of the Alternative Futures Project at the University of Hawaii. Jim is involved with many computer networks and is presently organizing a conference on science, technology and the future in Berlin. Jim wants to pose the following questions: Is science only a Western mode of knowledge? How does science as an activity change in response to new cultural pressures? What work is being done to articulate new needs and modes of inquiry in the sciences?

[1128] O'Regan

On a more sinister level, the security of the entire world now rests on the controls of the just such systems, and isn't it time we explored the outer limits of this for its impact effect on communication? Such systems are integral to all security systems at the military level, and even this terminal you are all using has more sophistication than I think some of you realize, e.g., for manipulating more complex programs in larger computers ranging in use from banking to missiles.

COMMUNICATION THEORY OF SECRECY SYSTEMS 681

into a given cryptogram E is equal to that of all keys transforming M_j into the same E, for all M_i, M_j and E.

Now there must be as many E's as there are M's since, for a fixed i, T_i gives a one-to-one correspondence between all the M's and some of the E's. For perfect secrecy $P_M(E) = P(E) \neq 0$ for any of these E's and any M. Hence there is at least one key transforming any M into any of these E's. But all the keys from a fixed M to different E's must be different, and therefore *the number of different keys is at least as great as the number of M's*. It is possible to obtain perfect secrecy with only this number of keys, as

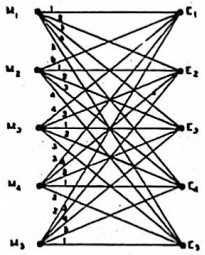


Fig. 5—Perfect system.

one shows by the following example: Let the M_i be numbered 1 to n and the E_i the same, and using n keys let

$$T_i M_j = E_s$$

where $s = i + j$ (Mod n). In this case we see that $P_M(M) = \frac{1}{n} = P(E)$ and we have perfect secrecy. An example is shown in Fig. 5 with $s = i + j - 1$ (Mod 5).

Perfect systems in which the number of cryptograms, the number of messages, and the number of keys are all equal are characterized by the properties that (1) each M is connected to each E by exactly one line, (2) all keys are equally likely. Thus the matrix representation of the system is a "Latin square."

In MTC it was shown that information may be conveniently measured by means of entropy. If we have a set of possibilities with probabilities $p_1, p_2, \cdots, p_n$, the entropy H is given by:

$$H = -\sum p_i \log p_i$$

A page from C.E. Shannon, "Communication Theory of Secrecy Systems," *Bell System Technical Journal* (Oct. 1949).

[1207] Gillette

To quote the indomitable Marianne Moore: "The power of the visible is the invisible." This is crucial to the art/science distinction. To quote her again: "dramatize a meaning always missed by the externalist." Too often weak "science" has to do exclusively with the external, while weak art has to do with the invisible having no apparent connection with the visible.

[1225]

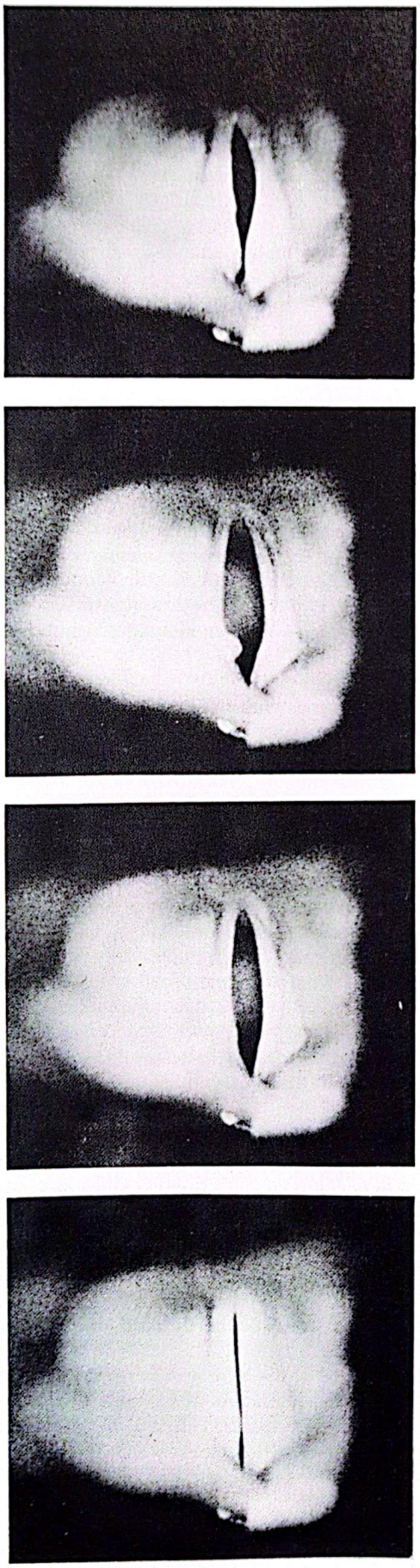
More on the art/science dichotomy: scientific explanation of phenomena does not necessarily diminish the *mystery* in the universe, but it does not actively promote it either. That is the domain of art. Religion cultivates respect for it, but only art revels in it, taking it on in all its grittyness.

[1581]

The teleconference seems to possess all the seeds for an authentically new species of *semiotic freedom*. This stage represents (in its first primitive forms) the invention of "terms" for another kind of conceptual diversity. The oscillation from metaphor to metonymy and back creates the beginnings of *syntactics* (intuitions of possible links and permutations) and *synecdochic* thinking (the mapping of transforms into motives of search which translate "objects" into "events").

[1658]
Summing up cybernautics

1. In one fundamental sense the conference skirted with a dangerous mistake (made elsewhere often enough)—that is, to adopt or "take-over" a vocabulary from cybernetics or information theory and then apply it to problems and descriptive models derived from "mechanistic" sources and pre-existing motives. To adopt such argots and vocabularies is to adopt a different set of epistemological premises. If the "problem" itself were rephrased in cybernetic terms (and constraints) it may not exist (to be addressed) at all. Its mechanistic essence is resolved in the transition from one descriptive mode to another. It is a question of the relation between vernacular choice and a given perceptual belief, of disregarding assumptions in the shift, of not clogging the transition with immiscible entities.
2. We "players" have glimpsed the potential for a transcontextual resource "bank." Everything comes into play toward synthesis without stop (metaphysical, informational, epistemological). All is mulch, any given recapitulation, in turn, also mulch for the next round of synthesis—paradigm, myth and symbolic system connected, disconnected, re-connected in permutating equilibrium. All is "post-ideological." No single set of conceptual boundaries is considered unalterable, or immune from second-order change.
3. "A poem is the dance of an attitude," wrote Kenneth Burke, and the "players" are the chorus line.
4. Compared to Hesse's monks and their bead-computer, this system represents the advance of *homo ludens* over *australopithecus*. The curve is asymptotic. It ranges from Duns Scotus to the "cut-ups"of William Burroughs. From occult grammars (Kabbalah, I Ching) to particle physics (quarks, quasars), yarrow sticks and Tarot in one sentient ball of wax. From the fundamental Vedantic notion of Sat, Chit, and Ananda (Being, Consciousness, Bliss) to schemes for paying teleconference rent.
5. It is germane to note that the linguistic root of the word *religion* derives from "re-connect," i.e., from the Latin *ligare* and *religare*. We have barely scratched the surface on the issue of the contradistinct attributes of art and science. Their respective traditions, methods, and truths serve as a fecund nexus with which to begin again and fin again along the riverrun, whence it all begins again.



One cycle of vocal cord movement at low frequency.

[1330] Charles Frazier
The Paper Museum

Two images from Herman Hesse's Magister Ludi form the substructure of the following thoughts: The undefined physical structure of the game itself and the picture of the central character, Joseph Knecht, slipping beneath the glacial waters of the lake.

In a forward to the translation by Richard and Clara Winston, Theodore Ziolowski described the glass bead game as "an act of mental systhesis through which the spiritual values of all ages are perceived as simultaneously present and vitally alive."

For Hesse the bead game was a symbol of the human imagination, not requiring a specific physical form, the game is the focal point of a province of the spirit called Castalia (the Parnassian spring sacred to the muses). Castalia is set apart from society. Culture is isolated from "reality" to develop in untainted isolation.

The fall of the Weimar Republic and the rise of Nazism caused Hesse to reject the separation of culture from the existing social reality.

Joseph Knecht, central figure in the novel and living Magister Ludi—Master of the Bead Game, eventually rejects the game as overly linear. Tragically this decision came too late. His ignorant body was not prepared for nature. He leaves Castalia to find work as a tutor and, following his pupil, dives into a glacial lake, realizing too late that a life of meditation has not prepared his body for survival in the simple element of cold water.

The older schools of thought that developed in China and Central Asia were balances between linear and holistic thought. This balance was expressed within the landscape through crafts and architecture. I am particularly drawn to China and Persia. Their arts express an extraordinary unity that is yet unformed in the society I live in. There is a language of surface older that written or oral language. It is spoken by the body.

Jalaluddin Rumi told of man evolving from the crystal, plant, fish, bird, animal, man to angel: storing within the flesh memories of all levels of life. In support of this holistic family tree is a basic proposition from Sufism: "In the realm of phenomena there are only connections without cause: no phenomenon is the cause of another. All causality is in the divine names, in the incessant renewal of their epiphanies. Thus the identity of a being does not stem from any empirical continuity of his eternal hexeity. In the realm of the manifest there is only a succession of likes from instant to instant." (Henri Corbin, *The Creative Imagination of I'bn Arabi*)

Islamic cosmological doctrine is structured on a profound understanding of the psychological behavior of man. This sense of unity is a manifold of conscious patterns constructed to correspond to the physiology and internal geography of the body.

EIES

[Text of Brendan O'Regan et al alternates every two pages with text of Frank Gillette.]

The Responsive Environment - An Expanded Concept of the Museum Environment and the Art Event 1/31/81

Brendan O'Regan

The majority view of the museum environment is that it is a "place" for art to be viewed by an audience. The majority view of the art work is that, whatever the medium or process involved, it is something "made" by the artist in some other location which is then brought to the museum environment to be viewed by others. Various attempts to break away from these accepted norms, whether in terms of the "happenings" of the Sixties, the "performance pieces" of the Seventies, or other departures from tradition in music and painting, are well known and documented. Only a few of these efforts can be said to have even attempted to embrace some of the possibilities inherent in some of the new technologies of the last two decades: The efforts of the Experiments in Art and Technology group and the Cybernetic Serendipity Exhibition are possibly the most well known here.

However, none of these projects or "movements" have ever specifically embraced the nature of some of the emerging technologies for their own special properties. Rather they "added them on" as an additional set of options for the artist, for reasons which emanated from the aesthetic text *before* the advent of these possibilities. There has yet to be any direct expansion of the aesthetic text that both stems from and embraces these new possibilities. Until this happens, it is unlikely that the level of "technological effect" will be transcended.

The present project both stems from, *and* is set directly in, the milieu of a special selection of the new communications technologies. Indeed, the grounds on which the selection itself is being made (which will be an inherent and on-going part of the various phases of the project) is itself part of a decision as to how the aesthetic text *can* be meaningfully expanded. Specifically, the selection of technologies to date has been made from those which collapse the process of time, space and information.

At the outset, the capacities of each may appear familiar:

> The "instant" transmission of personal text across global communications networks, accessible now to everyone possessing a telephone and simple computer terminal.
>
> The immediate and semi-immediate two-way exchange of graphic imagery—from slow-scan still images to full-colour two-way video linkages, also global in extent.
>
> The expanded "augmented human intellect" of individuals or self-selecting groups that form the membership of the expanding global computer data and communications networks.

Each of these systems has its current raison d'être, both financial and functional. Separately, they each could have "application" to art in forms that are familiar to us. Few groups however have concerned themselves with implications and possibilities inherent in the emerging *synergies* of such systems operating in linkage between themselves, a multi-disciplinary group of artists, scientists and scholars *and* a specially designed environment capable of displaying and responding to the products of all three interacting on a global, real, and delayed-time basis.

Perhaps the only precedent for this set of possibilities comes to us from several disparate, though symbiotically linked, groups. One major group is the Defense Department in the form of the Advanced Research Projects Agency (ARPA) of the U.S. Army. Historically, it has been this group that has almost single-handedly stimulated and funded the development and creation of the first global computer network apropriately called ARPANET. This same search for expanded military options today is providing the thrust toward discovering the possible advantages inherent in linking high technologies with their:

> Capacity for memories with random-access to image and text, both moving and still.
>
> Capacity to provide "infinite" choice to the viewer/learner thereby allowing the ultimate in individualized learning of the operation/maintenance of complex classified weapons, or the terrain of foreign power's secret bases.
>
> Ability to rapidly assimilate, cross-correlate, and abstract salient data from the works literature on any subject, in any language, at a speed which functionally collapses the research task from a decade of work to a day of retrieval time.

What kinds of characteristics do these uses have in common that differ significantly from how these expanded options may be applied to art?

1. The first and most obvious difference is that these uses are rooted in *teleological* concerns. The differences in capability between the various technologies are subdued to the achievement of specific purposes, deemed valuable to ARPA. This is in stark contrast to the attitude of "adding in" these capabilities for the artist.

2. The teleological goal produces the need for *synthesis* of the technological options. This leads to a modus operandi grounded in the idea of *experiential simulation* for the learner/interacters of complex situations that are otherwise unavailable. The simulation basis of these uses then serves as the context which attempts to draw forth a synthesis of the integrated output from the technologies that smoothly interfaces with the needs of human perception in the learning mode. (There is another aspect to this which we will deal with later: What is the impact on the human nervous system of this special kind of information environment?)

3. These uses have built into them an inherent sensibility to the highly individual nature of each potential user. They achieve this by attempting to provide a menu of options for entry/exploration of the system designed to interface with the anticipated need of the user. The sophistication of our ability to divine the proper structure of these options is only at its beginning stages—this relates back to the point made at the end of 2. In effect this is technological simulation of experience "in the hands of the user" as opposed to the "eye of the beholder."

With slight changes in language, all three of these points could be statements about art, and yet these options have never been used for making art. It is true that small steps toward this have been taken from time to time by artists using various combinations of video/assemblage technologies and media as well as art with primitive viewer-interaction built into it, thus moving, slightly beyond the "beholder paradigm" in art. However, the combinatorial power of the complex mix envisaged as the goal of this project has never been assembled to date.

As with the advent of almost any new technology, there are some new characteristics of these media-in-combination which must be given special consideration. Since these are new phenomena, they are hard to characterize; at first, they appear to be "invisible" but eventually they have the power to "make or break" the whole process.

Now we must explore something of the structural landscape of this cluster of disciplines, with the aim of outlining the elements of an epistemology of the aesthetic text that both stems from and includes the new possibilities in technologies that collapse space, time and information.

We shall see very shortly that any attempt to articulate an image of the operations—actual or potential, of what we shall from now on refer to as "Space-Time-Information Collapse" (STIC) technologies—will require some use of terms from disciplines that concern themselves with complex phenomena, network and systems phenomena, neuro- and psycholinguistics, and artificial intelligence. In addition, we will need contributions from philosophy, logic and aesthetics. To some this may provoke a raised eyebrow as it would appear to be a list that is spread over a terrain where the ice is very thin and the water terribly deep. However, this has always been both the curse and the strength of the field of cybernetics and the many other disciplines it has either spawned or influenced.

Teleconferencing User Characteristics: Usage Level, Understanding and Participation in Computer Network Processes.

As with any system of communication, there are procedures to be followed if effective communication is to take place. Computer teleconferencing is no exception. There have been enough people on sufficiently diverse groups of systems at this point so that some rather general observations can be made about their behavior, this difference between "good" and "bad" uses of these systems, and most important the kinds of conditions that need to be established if effective use is to A) occur, B) continue for a reasonable length of time and C) reach a level where it is possible to achieve specific goals beyond the task of "mastering the system."

In our case, all of these aspects need to be addressed with an even greater degree of discernment than usual because unlike other types of groups, who remain largely as message/data users, our specific need is to evolve used beyond this level, to include the aesthetic, artistic, philosophical and even spiritual realms. This will require facility beyond the norm—for at least all of the organizers, if not indeed for a significant portion of those ultimately chosen to become part of the Whitney Communications Project.

To begin to grasp what these distinctions may mean, let's look at some of what is now known about the "norms"of teleconferencing. The following statements are abstracted from the book: *The Network Nation: Human Communication Via Computer,* Chapter 3, "Social and Psychological Processes in Computerized Conferencing." Summarizing findings about social/psychological processes on computer networks, Hiltz and Turoff write:

1. Users evolve specialized norms with respect to the use of the facilities, communications and writing style. The acquisition of these norms by individuals/groups appears to be an important learning process on such systems.

2.User participation in conferencing in an active sense of contributing items seems to require some degree of usage *above* the basic level of learning the mechanics. This may be a second-level learning plateau related to established norms.

3. Users will gain facility as time passes, so that their input rates become higher than usual typing rates. For large groups, the time required to send and receive communications will drop below that required for other media, such as telephone or face-to-face meetings.

4. The user's short term memory may be a factor in conditioning frequency of interaction with the system, Users tend to become conditioned so that, on the average, they have about 7 items to send or receive per interaction.

5. In accordance with social exchange theory, no participant will continue to use a conferencing system *unless "rewards" are greater that "costs."* Among factors that increase reward for users are:

a) Ratio of items received to items sent. This increases with 1) size of active group, 2) throughout rate of the system.

b) Observable increase in skill and speed in using the system. This improvement is related to the richness of the design in terms of advanced features available to user once they have mastered the basic mechanics.

c) Importance of communication with system members in comparison with communication with persons not on the system; relative cost in time and money of other modes for communicating with people on the system.

Frank Gillette

Re: System and Identity 2/6/81

We begin with practice. With the terminal, its keyboard, attendant software and ancillary systems. The first question: How does a method originating in art engage the full range of possibilities concealed and emergent in this technology? It is now clear, even a commonplace, that art has not confronted this kind of pragmatic pallette in its entire history. The second question: What is the continuous "spindle of necessity" streaming through and connecting art's ways-and-means *and* the teleconference system, irrespective of discontinuity in technical means?

Tacticly, each *player* in the teleconference is immediately faced with the task of establishing/developing an identity, or characteristic signature, reflecting his interaction with the terminal and its extensions. To this end I choose to adopt Levi-Strauss *bricoleur,* the attitude of mind it represents being somehow oddly suited to the initial conditions in teleconferencing. Levi-Strauss' *bricoleur* is preliterate, this exercise in *bricoleurity* is *postliterate.* This position is introduced in response to the swelling aggregate of perspectives, hypothesis, and sheer data that is infinitely expressed and embodied in various spectrums of dissimilar media across dissimilar times. It implies a new integrative stance towards all "texts" which regards them singularly as mulch, fragments, partial views, specialities trapped within the contexts that instigated their respective existences and affects.

The *bricoleur* intuitively seeks out a *totemic* logic with which to counterstate the world in new terms of description, i.e., the *bricolage.* He assumes the primitive nature of the teleconference system in a reflexive exchange with its numerous modalities and contents. He perceives the network of players to be a collective "savage mind" evolving a new "science of the concrete." The *bricoleur* endeavors to precisely order, classify and arrange the peculiar minutiae of the immediate experience of teleconferencing.

The compelling feature of the *bricolage,* as a distinct way of knowing, is the apparent ease with which it enables a preliterate (or non-computer literate) *bricoleur* to create and establish satisfactory analogical connections between his personal (emotionally-centered) life and the life of nature (or teleconferencing) instantaneously, without hesitation. A *bricoleur's* totemic logic weaves its *myth* in order to move effortlessly from one conceptual territory to another, in order to contain and transvalue the helter-skelter of alternative explanations and an expanding inventory of *fuzzy sets.*

We begin with testing "concretely" the potential range of metaphor and metonymy the system can bear... We move from the "item-centered" (or *phonetic)* world (in art: the *object*) into the "relational" (or *phonemic*) one (in art: the *process*).

Re: On the Mnemonics of the Beautiful 2/8/81

As players in the evolution of this medium we are its pre-computer literates. This is a natural setting, however, for the application of art's totemic-logic system of reciprocal connection, which exists in direct opposition to the secular, positivistic and scientific employment of the present technology. The problem introduced to teleconferencing (and its extensions) when it is treated as an aesthetic medium can be located "historically" as the current manifestation of the eternally returning interrelationship between *art* and *techne.* The essential question is: What will it take for teleconferencing to evolve its own peculiar vital character and nuance?

Positioned within the aesthetic domain, teleconferencing becomes a medium of extreme potentiality. This is the immediate *lex eterna* governing a beginning discourse on the subject. Teleconferencing's present technical configuration is exclusively textual. But it is potentially *textual, imagistic,* and *diagrammatic.*

Re: Phonetic and Phonemic

The digital aspect of the *phonetic* and analog aspect of the *phonemic:* the matrix of players are like points in a pattern. Each point in the pattern is an ever growing/changing assembly of statements, some shared by other points in the matrix and some unique. *Phonetic* differences between two sounds only become actively meaningful to the native speaker when they coincide with the *phonemic* structure (points in a pattern) of the language in which it occurs. The players will assemble a shared (common) "language" as points in the pattern intersect. Meaning in this instance stems from the contrasting or oppositional patterns of its phonemes. The potential in teleconferencing is to develop new (regained) meaning from the contrasting or oppositional (totemic) pattern of its players.

Re: Difference and Resemblance

> "...the operative value of the systems of meaning and classifying commonly called totemic derives from their formal character: they are codes suitable for conveying messages which can be transposed into other codes and for expressing messages received by means of different codes in terms of their own system."[3]

No one can observe the difference, say, between a Cimabue and a Massacio and fail to perceive, and to feel, what *freedom* must have meant to artists in the Cinquecento. Likewise, at some undetermined future point, an observer may perceive and feel the novel freedom resulting from the quantum paradigmatic shift in the balance of forces and dynamics governing the engagement of *art* and *techne.* A body-of-work in the domain of art is actually the successful introduction of a class of private objects or processes as archetypes of general laws, i.e., private encoding of the general. The *techne* of our current epoch complicates the issue of a "class of private objects" and their aesthetic encoding. This new technical complexity is the semiosis, the aesthetic function of the process nominally experienced.

> "...introversive semiosis, a message which signifies itself, is indissolubly linked with the aesthetic function of sign-systems."[4]

As "introversive semiosis," art appears as a means for interconnecting messages in order to produce "texts" (private objects/processes) in which the rule-breaking roles of ambiguity and self-referencing are organized into an aesthetic idiolect.

Semiotically, ambiguity is defined as a mode of violating the rules of the code—to paraphrase Eco. Thus the fecund realm of *paradox:* an aesthetic idiolect peculiar to the work of art, which induces in its audience a sense of cosmicity—of endlessly moving beyond each established level of meaning the moment it is established, of continuously transforming "its denotations into connotations."[5] (This also relates to Barthes' account of connotation as a second order system of signification based upon denotation, involution, self-reference, discontinuity, ambiguity, transcendance, paradox: the stuff of art.)

Re: Aesthetics 2/10/81

Aesthetics is a loaded term. But none-the-less it is a critical issue in the teleconference discourse. It lost currency when it became exclusively associated with the formalist view of art developed by the students and followers of Croce. I have employed it deliberately with a view to igniting it in its original axiological sense. The origin of the more commonly held (and narrow) conception of aesthetics is Baumgarten's *Aesthetica* (circa 1750). Here (in Baumgarten and most modern aesthetics) it is defined as a logic of the imagination, a science of the "dark ideas" known by the senses, in order to supplement logic, the science of clear and "distinct" ideas known by the mind. From a contemporary (and ancient for that matter) point of view, this distinction (between dark and clear ideas) is quaint and a trifle unworkable; but by limiting the study of aesthetics to art and by defining it in so normatively narrow a fashion, it did succeed in developing a body of criticism of taste.

It is against the inertia of this conception of aesthetics that any re-introduction of the term must compare. Kant was probably the first to object to the emasculation of the term. He protested against Baumgarten's use of the word and applied it in accordance with its Greek etymology (perception by the senses, especially by feeling, seeing, hearing, etc.) to the "science which treats of the conditions of sensuous perception." (Baumgarten's narrow application of the term established itself nevertheless and both meanings have persisted sort of independently. A third independent meaning, at once more narrow and more wide than Baumgarten and Kant, was introduced by Schiller in his *Letters on the Aesthetic Education of Man* (circa 1795-80). It is narrower because it refers not to perception in general but to one distinctive mode of it in particular. It is wider because the field of operation is not confined to art; this mode of perception can assert itself in response to anything whatsoever; art is a special case within the general field, though it is peculiarly and specifically designed "to call forth" this response. Schiller's meaning is wider in another way too. It implies that aesthetic perception involves the whole personality. Sense-activity it certainly is, but its distinctiveness lies in the brief harmony of all the functions of the mind, feeling and thinking both, plus the fusion of both with transition states. Schiller further defined it as a state of precarious but infinitely fruitful equipoise, and as the way things dispose themselves when they are *contemplated for their own sake,* without reference to purposes, ends, causes, etc. Schopenhauer evolves Schiller's conception further as the aesthetic in the world's will: i.e., the aesthetic is one way among others of being related to things. What results from an aesthetic encounter, so defined, is knowledge, not mere pleasurable sensation. It is at once a detailed and intensely clear grasp of intuitive knowledge of the object/process nexus in its stark uniqueness.

Re: The Miraculous Multiplex 2/12/81

If the player's indulgence prevents his advancement to a significance beyond his *bricoleurity* (or one derived from the medium's "drenching possibilities"[6]) then it is a failure of the particular player that is up to question. This perceptual/cognitive approach is one of several methodologies to simultaneously generate and negotiate a great stewpot of conceptual systems, metaphors, analogies, lexicons, paradigms, mystic symbols, ancient hunches, jargons, worldviews, other methodologies and classifications that are the sub-structural mulch for a more refined methodology in the future. A refined methodology is akin to the "miraculous multiplex,"[7] i.e., a set of shaping principles of generation and cohesion to process and order all the vectors of depictive/descriptive proliferations flying in every direction.

Re: On the Teleconference as a Special Case

There is a general law of systems which when paraphrased states that increases in a system's complexity brings about stepwise, discontinuous increments in its functioning. The essential fact to grasp is this: these increases are *not* predictable. To stay alive the *given* must point beyond itself. Language is like the river: You can't step into the same word twice. The very idea of intellective discipline itself is subject to the *Roshomon* effect. Teleconferencing addresses this mobility, variability and discontinuity as a haptic maneuvering about the "miraculous multiplex" continuously re-adjusting itself. "...rooted uselessness... makes imagination live," says Barthes meditating on the Eiffel Tower. Cassirer asserts that "the building of intuitive reality begins when the continuous flow of sensuous phenomena begins to divide."

Three pairs of epistemic division:

1. Heidigger's distinction between *calculative and meditative thinking* (or language).
2. Jakobson's distinction between *referential and aesthetic use of language.*
3. Kenneth Burke's distinction between *symbolic action and non-symbolic motion.*

All three are separate ways of applying strategy within teleconferencing. (Brendan's message: its "drenching possibilities.") A central axis in the developing motif index is the arch-notion of a division of experience into fundamentals and/or irreducible grounds designed to distinguish one *kind* of thing (sensation, experience) from another. The "symbolic act" of *division:* of introducing dualities, turbulence, difficulties in the form of a tableau (tableau is the actual adaptive variable of depiction/description(s) within the motif index).

Brendan O'Regan 2/7/81

The notion of *bricolage* from Levi-Strauss is apt here in many ways, and it could be particularly appropriate if we were confining ourselves in this project to the teleconferencing process *only*. For now we are concerned with a shift from product to process—the process of arranging into structure the odd minutiae of the immediate experience, but *also* the process whereby the nature of these expanded media, via their very special interaction with human neurological process, serve as filter and amplifier of our output/input.

Picture this as a primitive but multi-headed *Turing machine* in which the distinctions between minds creating input are blurred by the manipulations of software. This is akin to the new *functionalist* school in philosophy, whereby analysis proceeds from a consideration of how the hardware (biological, micro-processor, what have you) is organized and not the nature of the hardware itself. This school attempts analysis of the world on the basis of how *information* in the world is organized, and attempts equation between similarly organized systems—whether animate or inanimate. This strikes home with the vitalist in any of us, but it also raises the ghost of Turing and even the spectre of *Gödel, Escher, Bach* with its reductionist preferences.

Frank, would you please enter the etymology and genealogy of the word *aesthetic?* My memory is that it comes from *esthetikos* meaning "sense perception." Could we break it down further? Another point: it is typical of philosophies of aesthetics to articulate terms and systems considered independent of the brain/mind system. Usually, the mind = brain identity is heavily embedded and then forgotten. I will argue throughout that there are real distinctions of process between variously accessible conscious states, and that these systems induce significant alterations of state, the process nature of which we should attempt to elucidate as we proceed.

I am not certain how the phonetic/phonemic distinction which follows Jakobson et al applies in identifying a conference as a language. Shouldn't we be referring to "discourse" rather than using linguistic and specific semiotic systems references? I am not sure how the process of teleconferencing establishes this high order of "cosmicity" and "ambiguity." Eco's limitation is to have such a rule dominated semiotic system (model) which is unable to deal with ambiguity and "non-narrative" art (read: outside of an established code). I am not certain, to follow your references, how "the rule breaking roles of ambiguity and self reference are organized into an aesthetic ideolect." Since ideolect presumes a language, what's the language, and what do you mean by aesthetic?

The Responsive Environment 2/11/81

> "...Time and space are modes by which we think and not conditions in which we live..."
>
> —Einstein

A prologue to this medium must inevitably be drenched in all its possiblities if it is to achieve significance beyond the selection of one strategy. (E.g., "bricoleurity"—as with much of Levi-Strauss, it is more his method than his data that attract attention. This method here may sometimes compensate for less than nonserial immersion in the perceived distortions [relative to literate norms] imposed by consent to signal each other via the media of space-time-information-collapse technologies. What is the signal, and where is the analogue? How do we differenciate phonemic units, and how do they combine to form the "phonetic"?

Recall Weiner's cybernetic injunction that the most sophisticated intelligent machine would allow digital process to be controlled by the softness of an analogue overlay—that higher form of "fuzzy set" which in its plasticity allows the hard edges of precision to be directed toward non-zero set of possibilities. Herein sleeps the slumbering giant of teleonomy's analogue targets. Add too the movement toward invisibility of "causes" throughout these complex, interacting networks, whose "drivers" should all fool Alan Turing into thinking their desire for lunch was more than a clever program.

Here we begin work with the hierarchy, structure, and difference between *autopoiesis* structure/organisation maintaining homeostasis and *allopoiesis* (homeostatic operations leading to products other than the system itself) and apply our distinctions to how first-order cybernetics/aesthetics lead to and impose order on second-order cybernetics/aesthetics.

First and Second-Order Aesthetics: Perception and Process States 2/11/81

Adopting Von Foerster's distinction between first and second-order cybernetics, it could be argued that there is no truly first-order aesthetics, distinct from second-order process in relation to observed systems. The distinction, however, is worth maintaining since it precisely delineates differences between traditional "abstract" definitions of aesthetics as objective order "out there" and more recent, complex traditions, e.g., Schiller/Schopenhauer who express themselves in terms of a balance between the senses, intellect, and cognition of the world via the axis of auto/allopoietic poise of mind and object. This Romantic restoration of perceptual process is necessary for any analysis of consciousness and aesthetics and only makes it more apparent how philosophers ignored this territory which now invents data on instinct, variations on form and process of unconscious and preconscious states, as well as matters of poise between cognitive awareness and interactive acceleration possible with this technology. The terrain is less and less suitable for "objective" examination with the recognition that this interaction makes possible novel process states, continually modified by the self-referential capacities of the technology: a Nietzschean dilemma transposed. All is less forbidden, because *even* more is permitted with higher frequency before. This dilemma was foretold by the poets and prophets of the 19th century, but these forms represent a discontinuity in kind only now operational.

Procedures on Assembling a Glossary

Glossary entries will be assembled throughout the conference in small groups of messages which will facilitate subsequent

use via electronic editing. Thus they can be selectively deleted, modified, and added to by others. Later entries out of alphabetical order will be re-arranged to fit in sequence so that in the future (for display/demonstration purposes) the glossary printout can be recalled as an up-to-date document.

What follows is the first series of entries. The source is *Mind and Nature* by Gregory Bateson with additional information from *The Cybernetics of Cybernetics* by Heinz Von Foerster. The terms entered here are chosen on the basis of their relevance for the description of natural systems as a class which *includes* the existence of mind. Hence the base-value of Bateson's work. This choice relates to the nature of present systems as a special form of group mind, now capable operating in nature. Some members of the "artificial intelligensia" would, of course, argue from the functionalist view point that this system may not represent a conceptually distinct form but simply a different physical manifestation of an organizational form which already exists in intra- or interpersonal/brain interaction/communication.

co-evolution: a stochastic system of evolutionary change in which two or more systems interact in such a way that changes in system A set the stage for the natural selection of changes in system B. Later changes in system B, in turn, set the stage for the selecting of more similar changes in system A.

homology: a formal resemblance between two organisms (systems) such that the relations between certain parts of A are similar to the relations between corresponding parts of B. Such formal resemblance is considered to be evidence of evolutionary relatedness.

idea: In Bateson's epistemology, the smallest unit of mental process is a difference or distinction or news of a difference. What is called an "idea" in popular speech seems to be a complex of such units. But popular speech will hesitate to call, say, the bilateral symmetry of a frog or the message of a single neural impulse an "idea."

information: any difference that makes a difference.

stochastic: (Greek, *stochazein,* to shoot with a bow at a target; that is to scatter events in a partially random manner, some of which achieve a preferred outcome.) If a sequence of events combines a random component with a selective process so that only certain outcomes of the random are allowed to endure, that sequence is said to be stochastic.

cybernetics: (Greek, *kybernetes,* steersman; Latin, *gubernator,* governor.) "Cybernetics is a word invented to define a new field of science. It combines under one heading the study of what in a human context is sometimes loosely described as thinking and in engineering is known as control and communication. In other words, cybernetics attempts to find common elements in the functioning of automatic machines and of the human nervous system, and to develop a theory which will cover the entire field of control and communication in machines and living organisms."—Norbert Weiner *Scientific American,* November, 1948).

first order cybernetics: the cybernetics of observed systems.

second order cybernetics: the cybernetics of observing systems. (Cf. Heinz Von Foerster, *The Cybernetics of Cybernetics,* University of Illinois Press, 1974.)

teleology: the notion in evolutionary theory that purposive behavior can act as a causal agent in the structuring of systems. The term generally refers to goal-seeking behaviors.

teleonomy: A more recent view of teleological process which suggests that goal-seeking may occur via a systemic network of possible processes, rather than "naive teleology"—aiming straight at a recognized goal.

autopoiesis: In cybernetics, this is a special case of homeostasis in which the critical variable held constant is the system's own organization.

Responsive Environment Technology

There is an interesting group of people *already on EIES* whom we can tap for useful information on new technologies that can be added to create the basic module for artists to engage at a sophisticated level. I have been conducting my own search with these people, identifying new ones, following leads and so forth. I can continue to do this individually and transfer particularly appropriate messages, or we could initiate a technology conference of our own to tap this network directly and achieve a much faster precis of what is known. I gather that there is a public conference on "Telecommunications and the Future" which I have not had time to check out yet.

Frank Gillette

Re: To Invoke the Authority of the Ineffable 2/16/81

Northrop Frye, inveterate inventor of categories, speaks of classifications within the *iconography of the imagination:* those proto categories in which the aesthetic imagination seeks to *prehend* experience. A particular player's method of prehension reduces to an actual subset of all possible iconographies within the encodable descriptive/depictive repetoire. From this vantage-point the teleconferencing system invites one to accommodate a less conventionally "disciplined" operating bias: one that chooses to accept the system's contrastive and oppositional potential (especially at the beginning). The player goes on to discover a novel form of "dialogue" (one that optimizes the parallel, co-equal novelty of the embodying technology). Heidigger, in fact, correlates excesses in the *calculative* method with the general state of technology (techne) itself. That is: They are inseparably intertwined. Following Heidigger, the *meditative* method can be employed as an antidote, or "counter-statement," to a calculatively over-corrected techne. This is an expression of a way in which art *contains* science.

Re: Epistemorphic Difference 2/17/81

"The contour escapes me..."[8]

Following the scholastic adage that whenever you encounter a contradiction you must make a distinction, the *bricoleur* submits Peirce's idea that beliefs are really rules-for-action. (The old chestnut *substance/attribute* distinction suggests itself as an initial division.)

William James (one hell of a pioneer in haptic maneuvering, if there ever was one) judges the truth of an idea by a measure of its "cash value." "True ideas are those that we can assimilate, validate, corroborate, and verify. False ideas are those that we can not." What is the "cash value" of these teleconferencing methods?

Adopting James' notion of up-to-snuff "cash value" as a necessary criterion of index-acceptance with Nabokov's definition of art paraphrased as *the reality we extract from reality:* It comes down to yet another division combining the attributes of *universality* and *necessity. Teleconference-value* of an entry must perforce be subject to a kind of natural selection based (in part) upon the pragmatic fascination it selects as "a reality."

Each "reality" opens upon the realm of the semi-factual, bringing into bas relief the epiphenomena of "factual" experience. "Meaning" (including desired "cash-value" ends) changes from the *first order pattern* "take" to subsequent *second order pattern* "expansions" generating an analogue of what the logician calls *factual conditionals* (viz: one of the jointly *sufficient conditions* for a certain state or event *necessitates* that state of event. That is, what is *necessary* will have a way of meeting its *sufficient* conditions.)

Re: On the Making of Epistemorphs

The following originates with paradigm-fragments that have remained with the *bricoleur,* that have impressed themselves upon his intuition, having passed through the private filters of subjective validation. For example, from something as crusty as Hobbes' *Leviathan* this strange rhyme: "Words are wise men's counters; they do but reckon by them; but they are the money of fools." Here is another chard, another refracting "mind-facta" to rub against the Hobbesian assessment: "The words remained in his heart like a burning fire" and "because ye speak this word, behold, I will make my words in thy mouth fire, and his people wood, and it shall devour them."[9] Metaphors enfolding back on language are in a class by themselves because they speak with what they point at. This is especially acute when the messaging system is exclusively textual. Jeremiah and Hobbes both suggest a *cor irrequietem* hovering around the capacity for language, for words. They imply a restless discontent growing into anxiety over their apparent power.

Re: "The eye believes and its communion takes"[10]

Problematically, art fluctuates between the *optical* and *haptic.* To receive a tactile sensation by simply seeing something vs. the haptic reconversion of the sensation: the *felt* is *seen. Haptic* is that element in the aesthetic experience that is grasped independently of optical-formal considerations (interpretations). Teleconferencing (as a network of *bricoleurs*) is haptic— simply incapable, as yet, to seriously address the optical dimension. The *felt* in this case is a mode of discourse: a *collective text* building up from initial definitions.

Re: On Simularity 2/22/81

"...in their games, dreams or wild imaginings...individuals never create absolutely, but merely choose certain combinations from an ideal repetoire that it should be possible to define."[11] (James refers to *association by simularity* as the "electric aptitude for analogy.") The act of linking together with the principle of "assonance" is in effect a grounding in an optimum density of reference where the processes of allusion arising from each referent intersect. Allusive economy evolves as the density of reference builds-up.

Re: Terms for the Conference Glossary 2/22/81

Metaphor:

"*Metaphora* consists in giving the thing a name that belongs to something else: the transference *(epi-phora)* being either from genus to species, or from species to genus, or from species to species, or on the grounds of analogy."[12]

Metaphor consists in "the presentation of the facts of one category in the idioms appropriate to another."[13]

"Metaphor is a devise for seeing something in terms of something else...a metaphor tells us something about one character considered from the point of view of another character. And to consider A from the point of

view of B is, of course, to use B as a *perspective* upon A."[14]

"However appropriate in one sense a good metaphor may be, in another sense there is something inappropriate about it. This inappropriateness results from the use of a sign in a sense different from the usual, which use (is called) *sort-crossing*. Such sort-crossing is the first defining feature of metaphor."[15]

Metaphor is the genus in which the following are species:

analogy

trope

metonymy

synecdoche

catachresis

Re: Sort-Crossing and Bricolage **2/23/81**

"Every message is made of signs: correspondingly, the science of signs termed *semiotic* deals with those general principles which underlie the structure of all."[16]

"...Human beings communicate by non-verbal means which must consequently be said to be either non-linguistic (although the mode of language remains formative and dominant) or which must have the effect of 'stretching' our concept of language until it includes non-verbal areas, in fact such 'stretching' is precisely the great achievement of semiotics."[17]

"...in every society various techniques are developed intended to fix the floating chains of signified in such a way to counter the terror of uncertain signs."[18]

"What semiotics has discovered is that the *law* governing or, if one prefers, the *major contraint* affecting any social practice lies in the fact that it signifies; i.e., that it is articulated like a language."[19]

Teleconference as Small Group

[An aside: Thus far Brendan's text assumes the characteristic identity of the cybernetic adept. It has pointed out and defined the cybernetic controls lodged in the value system created by this exchange. The *bricoleur* accepts and adopts these definitions, in the main; where he feels an urge to add or (presumes to) modify a definition he will enter it into the glossary of terms next to the existing definitions(s).]

Taking the cue from Kristeva's "major constraints affecting any social practice," teleconferencing is a novel social practice. It is, for that matter, creating artifacts and clues to its own branch of micro-sociology. As social practice, teleconferencing seems unique in its wobbly balance of oppositional dynamics. It is as if perched between *gemeinschaft* (the primary face-to-face community of "home" and "family") and *gesellschaft* (the impersonal, bureaucratic society, or socio-technological order). The *gemeinschaft-gesellschaft* divide is a logical type of social relationship designed to embrace any society from the tiniest village to post-industrial society. Teleconferencing (in this sense) is anomalous and unique in that it *involutes* the primary face-to-face sense of community through the medium of an impersonal (remote) technology (a small group defined as not more than 15 in this instance). The very fact that the product is text printed on a scroll only adds to and encodes the sense of social anomaly. The social engagement is prototypical in its combination of *intimacy* and *opacity* of *digital remove*.

Accordingly, Parsons fits all social relations into the following (paraphrased) categories:

1. *norms* or standards which may be "universalistic" or "particularistic".
2. *statuses* which can be achieved via work or education, ascribed or assigned.
3. *roles* which may be specified, like that of teacher (or moderator), or diffuse, like that of father (or adept).
4. *emotions* which are neutral or impartial, affective or partial.



above: Leon Bollée with his multiplier. Only a few of the massive machines were sold, one of them to the Belgian Ministry of Railroads. Bollée's long career as an inventor began at the age of thirteen when he patented an unsinkable aquatic bicycle. (An Englishman named Rigby rode it across the English Channel.) He followed this success with others, among them a cash register and a machine which distributed railway tickets. When Wilbur Wright came to France in 1908 to demonstrate his airplane, Bollée placed his automobile factory at Wright's disposal.

James Harithas 2/17/81

I would be more at home in the agrarian, mytho-poetic thought of Ancient Greece which leads to the *Iliad* and the proto-philosophical speculations of Hesiod. I agree, however, that the *bricoleur* is an initial and, simultaneously, initiatory process, a means of entering the technology at the most elementary level. Greek thought and language provide a more sophisticated layering. *Bricolage* concentrates on use of the basic codes of duality, identity, analogy, and comparison; and in addition, the creative processes of stream of consciousness, collage, other forms of relativism, and by extension, catastrophe models, puns, etc.

The question of how to use *bricolage* effectively as a machine language is still moot. I assume Frank means that any poetic analogy assumes a factual or philosophical reality within the disourse he constructs, where objects or objective statements function as metaphors. I'm confident there is no difference between our illusive aesthetic and our pure, haptic sense of reality.

John G. Hanhardt 2/17/81

I have some questions on the use of linguistic and semiotic terminology which seems to define something other than what the textual production of teleconferencing suggests. If we are talking about the relation between communication structure of a text and its grammatical structure, there is no one-to-one relation between the two. We must establish a more general model of textual analysis than that proposed by strict linguistic and semiotic models. The function which determines the textual process is its communicative function. Perhaps we should interpret texts as systems? Thus if we suggest that each system is a process directed through its function, then by extension the communicative function determines the textual constituents. Different types of texts differ through different types of textual function—not as dialects in relation to each other but as different processes which share in a network of interrelated components. The different components, manifestations, of this structure are correlated by the communicative purpose of different texts. It seems that teleconferencing networks are engaged in this type of interrelatedness, and analysis is not based on particular linguistic properties but on more abstract features such as dynamics and cohesiveness.

James Harithas 2/23/81

I understand the *bricoleur* as one possessing a method of abstraction based on the use of psycho-social cultural debris, that is, on fragmentary experience from *any* information which by itself may be random or incoherent, as long as it is interesting to the *bricoleur.* The *bricoleur* reorganizes this information into myth, ritual, art, or medicine according to his specialization and purpose. This approach not only acknowledges as its own the medium of collage, but it defines the techniques used by the Surrealist. It explains the Surrealist use of signs culled from psychological processes and juxtapositions. *Bricolage* is the base method of Surrealist inquiry and later of Pop Art which deals with subliminal content more particularly.

This method seems too conveniently and literally dependent on memory, on totemic (i.e., atavistic and intuitive) forms of classification which in turn establish their need for inventories of various kinds. This is a limitation of sorts. I see art as being in essence virtually free from the strictures of memory (as for example the Abstract Expressionists) and as involved in a process which leads to creating through access to an expanded consciousness, one which occurs through the recognition or revelation of "something out of nothing." The artist may elaborate this "something" by transforming it after the fact into a cultural artifact through the appropriate *stylistic* language or, alternatively, through some kind of figuration.

In other words, the artist does not simply have to establish formal systems which address social or mythological longings and aspirations; rather he develops a visual language based on his experience with categories of feeling which are untouched, unknown and "out there" beyond the reaches of memory but innate to some mysterious potential of the mind. This may be just a definition of expanded memory, but I prefer to think it is some biological source of the freedom necessary to the creative act. On the other hand, I do see virtue in experimenting with the memory systems of the computer, together with ideas about ideas, about art and various forms of teleconferencing. This may lead to astonishing results. It is obvious to me that the final work of art may be a collage which does not simply document an exchange of ideas, but one in which the information kindles the *spirit* through its expression of deep feeling and shades of feeling which are new to the human mindscape.

Brendan O'Regan 2/23/81

I have recently been engaged in communication with Robert Heinmiller who is at M.I.T. There he manages the electronic mail communications system for the U.S. Oceanographic Survey. This is a system of teleconferencing operations to approximately 900 ships all over the world. Apparently they make use of an unused NASA satellite. I asked him for information on their recently developed technique for sending imagery and graphics over EIES-like systems.

I think this information is of the greatest interest both for its conceptual implications for this project and as a source of ideas for the actual *responsive environment* technologies that might ultimately be part of assembling the museum of the future.

James Harithas 2/25/81

I must confess to having certain expectations about the teleconferencing process itself, involving its potential to enhance and expand whatever input. Before I get into this, we need to understand its potential for making art. Is "computer space," for example, analogous to that of the primed and gessoed canvas which symbolizes the essential coherence and purity of consciousness. Is it like the space of the cathode ray tube read as sanctified ground. In forms as secular as Pop and video, the obvious commercialism notwithstanding, the context is procedural. The results may be different from their commercial counterparts, revealing themselves through symbolic forms and/or rituals unique to art.

Brendan O'Regan 3/4/81

A Scroll to the Scholar
Twixt cathode and canvas lies an invisible rub, a roomy space with great delusion, deluge, delinquent derivations of mindscape removed from skeletal coordinates—a floating place where too much may seem unforbidden but not all permitted. The output is structured, but the interior free for the wandering. Some fear to wander, others suspect the wanderer! Imagine it axonally, synaptic flash and all! Consider it neuronally, blind alleys appall! Behold Akasha! More words than brains can hold. The empirical residue has evaporated.

James Harithas 3/15/81

I would like to begin my formal relationship with the teleconference with a statement about what I shall attempt to contribute to it. Following my last entry, I wish to further clarify my ideas about the relation between the computer process and art. I wish to isolate and explore the mental processes and images which belong to such aesthetic formats as Surrealism, Expressionism, Pop, the media-derived forms of the past 10 years, in order to see if and how they can be communicated through the teleconferencing process. For example, a "Surrealist" analysis may involve a factual description of a particular location derived from a geographical survey, a textual account of a mythological event, and a synthetic or unrelated sound tract. This may be conveyed as pure narrative, also as random collage such that all elements are present in discontinuous relationships.

Steven Poser 3/16/81

The mixed quality of participation and observation of communication in the teleconference suggests the analogy of a field of particles (as units of display, transmission, retrieval) that expand in density and elongate in time with instantaneous access to the past, a self-correcting universe moving from chaos to order.

In real time, the conference occurs to me as another place to be—contemporaneous and parallel, but allowing for travel back in time, thus historical as well. *Question:* What is special about teleconferencing, and why is that interesting? I would adopt this provisional policy: a natural bias against unmotivated jargon, "unearned" theoretical machinery, the appearance of meaning. My first problem was discovering how to talk, how to establish an implicit etiquette of discourse. I have more sympathy now for what Frank is up to. But that doesn't eliminate the need for consensus about unifying issues.

At this stage it would forfeit any possible outcome to be seduced by surrealist practice which would allow the conference to take on the figure of an exquisite corpse. Perhaps collaboration on the glossary will become the dominant subtext or repository for some emergent definitions.

3/24/81

I would like to test some hunches and make explicit my own interests in our exchange. I put them in the form of two substantive theses:

1. That there are very strong conceptual ties between a philosophy of mind and a philosophy of art and thus between the questions of "what is thinking?" and "what is art-making?"
2. That insofar as cybernetic concepts and models bear on the recasting of old problems toward the development of a new philosophy of mind (and/or epistemology of the organism, e.g., suggesting a direction or the evolution of consciousness), they are inherently and immediately relevant to the question of what art is, ought to be, and can be. And thus go to the heart of what aesthetics is supposed to be about. (Cf. Frank's glossary entry on *aesthetics)*

I believe that in some refined version of their intended meaning all these things are true and near the collective heart of the matter.

Is our subject the means of communication and how the conference is to be conducted? Then we are courting reflexivity, recursiveness and self-scrutiny which may deter more than help our purposes. We may get fixated on the idea that the conference is immediately an embodiment of a collective mental process, made possible by a new instrument of communication technology.

Are we engaged in creation of a collective artwork or not? If the conference proceeds on the level of ideas, it is a collective inquiry, not a collective artwork. If the resulting document is a kind of literature, that's fine; but how do we procede as participants? The problem is this: We are using a new means of communication which allows for unprecedented modes of interaction and exchange, accelerated by speed of access and retrieval, unbound by constraints of time and space. Are we to take *that* as our subject and develop its epistemology and pragmatics; or do we take the technology directly into the context of art, art-making practice, and the nature of the museum?

Perhaps it is only a matter of emphasis. I don't propose to make hard distinctions, but we must discriminate between two descriptions of what we're doing:

A) talking about the aesthetic implications of these kinds of systems, and
B) talking about the implications of these kinds of systems for aesthetic theory.

Our agenda is at stake here. By the first description, we ought to talk about the formal, technical, and conceptual nature of the medium of the teleconference as well as telecommunications and "systems theory" along with associated pragmatic dimensions (political, psychological, etc.) in this domain.

By the second description, we should be immediately interested in the question of whether such systems give shape and access to information in ways that are relevant to thinking about *art, the creative process, the nature of the museum.* My feeling is that we are shooting for the second, and picking up whatever we need from the first, almost by necessity. The sense of a collective manifold of input and response (the manner in which we have chosen to conduct the conference) guarantees that the medium will be an aspect of its own subject.

Frank Gillette

Re: Toward a Circulus Methodicus of Interconnection
4/8/81

From the player's vantage, the teleconference process derives from the engagement of metaphor and metonymy. The present juncture should be firmly grasped as a shift from a wealth of sources (often referred to as resources) to a redeployment of such sources in such manner as to recirculate their initial dissonance, or freshness in discontinous context. The activity itself is a sufficient metaphor for summing up all the recorded dialogues and "texts" within the multiple purviews of the cultures within the particular reach of teleconferencing itself. From here the system of keyboard, phone link, phantom satellite, shared time network, et al, is a proto-medium for cerebral savagery.

Teleconferencing as Neologic

> "Neological theory holds that there is an interrelatedness about the world which means that almost anything may turn out to be relevant to something else, if looked at in a different light."[21]

Neologic contemplates the preverbal *milieux* of thought in which any particular experience was stored as a memory of what it sounded like, how old it was, in what season it happened, how hairy, how soft, how hard, etc.

When confronted with a conventional or traditional logical impasse, operational neologic advocates judgement-suspension, silence and soliliquoy, distraction, and irrelevance. One uses peripheral reading, environmental scanning, metaphorical play and accidents.

> "...the essence of aesthetic transposition, let us say of aesthetic promotion, is to introduce onto the plane of the *significant* something which does not exist under this mode or under this aspect in its uncultured state..."[22]

Re: Teleconferencing and Operational Identity 4/14/81

> "...the individual observation assumes the character of a fact only when it can be related to other, analogous observations in such a way that the whole series 'makes sense'. This sense is, therefore, fully capable of being applied, as a control, to the interpretation of a new individual observation within the same range of phenomena...if, however, this new individual observation definitely refuses to be interpreted according to the 'sense' of the series...the 'sense' of the series will have to be reformulated to include the new individual observation."[23]

Kuhn speaks of *normal science* as any discourse which embodies agreed-upon criteria for reaching agreement; *abnormal discourse* is any which lacks such criteria. This teleconference is a manifestation of *abnormal discourse*. The "problematics" of each teleconference "message" tends to deflect the attention from the actual information in the entries themselves. The accumulated effects of the total entries of all the players would yield more than a circular wandering simply in search of explanations of the experience of experience.

There is the crude proto-beginnings of the *motif index*. There is the actual *cash value* of the "content" of each of the entries taken individually or within particular patterns of context. There is primary data on the micro-sociology of this "abnormal discourse." There is the whole hairy issue (apparently an upsetting one) of defining an operational identity "on the line" so to speak.

Bergson's "emergent evolution" says essentially: When two or more simple (basic) entities come (fall) together they may add up in unexpected ways. This simple notion is an operating assumption of *bricolourity*.

More operating assumptions: This medium (including its network aspect) is the vehicle for linkages between coincidence, chance, seriality and synchronicity (and potentially the syncopation of models, concepts, methods and epistemes). The first stage, *linkages*, is still in progress and is characterized by fragmentary tactics of *bricolage*. The next stage, *syncopation*, will probably be characterized less by *bricolage* and will be neological in its formal arrangements and refinements (including results from the kind of contingencies that now seem useless).

All this rests on the deeper assumption that art is the chief agency of *discontinuity* in human affairs, and that *discontinuity* has a vital function in the very existence of the species and is central to its survival. Art, from this perch, is the carrier of periodic, or cyclic, interventions in the equilibrium of things.

Re: Conventions in the Techno-Public Domain

How do we navigate the flow of definitions and divisions, the sort-crossings emerging from the ground of textual exchange? What kinds of "filters" are possible for elevating the "chance" couplings of context/meaning into formal expressions in their own right, independent of the *chance* nature of their genesis?

A central feature of teleconferencing formalism is that, in part, it is a species of "inner space" and, in part, "techno-public domain." (A natural meeting ground for solopsistic imperialisms of every stripe.) How does this feature, this singular synthesis of public and private, determine the "shape" of its information?

When each player in the network defines a distinct operational bias and embodies a set of individual working methods, how will a successful consensus emerge and evolve? How do we design a way to achieve consensus?

Re: The Double Axis

"...a throw of dice will never abolish chance..." said our precursor Mallarmé. I am pulled to linguistics again in search of metaphors for the "sensed" structure emerging in the content of this exchange. Jakobson's distinction between "aesthetic" and "referential" language seems apt and naturally fits in the following way: "Poetic" language projects relationships or equivalence on the *paradigmatic* axis (the axis of *selection*

and *substitution*) and the *syntagmatic* axis (the axis of *combination*) simultaneously.

Teleconferencing, as a "command" activity, is double-axial in the same way. Players can operate within the distinct axial domains separately and linearly in Jacobson's *referential* sense. Or they can operate within and between the axis in random or stochastic ways, Jakobson's *aesthetic* sense.

> "If one calls *bricolage* the necessity of borrowing one's concepts from the text or a heritage which is more or less coherent or ruined, it must be said that every discourse is *bricoleur*."[24]

> "The blurring of boundaries is not a good in itself... promiscuous or hybrid... forms can easily degenerate, yet such forms are the crucible from which new and discriminating achievements have traditionally come."[25]

It would appear as if Wittgenstein's "language is a way of picturing" were subject to inversion: How is the picture a way of making language or "languaging?"

Re: Epistemorphs and Dramatistic Tension 4/15/81

In the phrase of another idiom, the total discourse so far is a search for a *systems architecture*—a *method*, once stable and efficient for scanning, selecting, and integrating the combinatorial elements entered into the teleconference "space" by other players, and preoccupied with different methods, other bias, separately defined needs, et al.

Epistemorph is defined as any entry into the teleconference discourse that although altered or qualified by other methods, enters the motif index of innumerable such entries (points) in a set of unequal, shifting interrelations. Thus the *epistemorph* is understood as the minimal meaningful unit of information (formalized or raw). At this juncture in the teleconference the *epistemorph* is restricted to the textual statement, but an *epistemorph* is potentially a diagram, an image, a text, a combination of the three.

An *epistemorph* is a conceptual tableau directed toward synesthesia.

Entries are described as *epistemorphic* when they are assertions about *knowing* as it bears on the conceptual-intersecting taking place at any point in the discourse. Thus the "natural selection" of *epistemorphs* by some inclusive (and/or transcending) contingencies measuring survival (or "cash-value").

Re: The Engineer vs. Homo Ludens

View "A"

The actual and potential structure of teleconferencing is an opportune extension and enhancement of the pre-existing ways and means (methods) employed by various special cases: weather forecasting, psycholinguistics, mathematics, cybernetics, semiotic "practice"—whatever. This makes better specialists by organizing data, bringing their respective clans new senses of unity or infrastructure, thereby making their progress more swift and sure. That is, from this vantage point, teleconferencing is a technological advancement which accelerates processes already in place. It will help mathematicians calculate, cybemeticians cybernate, managers manage.

View "B"

This view concedes the compelling necessity of view "A." Yet it prefers to understand teleconferencing and related technologies in terms suggested by the inherent and open nature of the experience: to view the process heuristically; to see it as a tabula rasa; to develop procedures of wandering and play; to see it in its own right, for its own sake, but to see it askance as well.

Re: The Redundancy of Potential Command

Levi-Strauss defines a code as a means of "fixing signification by transposing them into terms of other significations."

After this much hands-on experience, I can imagine each player as a code-maker, or codifier, developing multiple lines of conceptual and paradigmatic counterpoint evolving simultaneously with no single line predominating. "Goaded by the spirit of hierachy,"[26] the players (each with a distinct operational style) would fulfill to the analogous "letter" Warren McCulloch's *redundancy of potential command*.

Structurally, a player's *theater-of-operation* (the relation between differences) states and demonstrates complex and unpredictable analogies of experience. There is no a priori "command" structure. Command becomes a function of selection. All players in the teleconference have an equal dose of potential command. At any given point in the actual discourse itself command will reside with one or a grouping of players, depending on ground rules, pragmatics, and the random unknown.

From this interplay of sensory barbs an index of *epistemorphs* results, as if by "secretion."

Re: Metaphor and Metonymy

A return to analogies of binary opposition, contrastive exchange, and dialectical (or dramatistic) tension in order to approximate actual and potential processes experienced in teleconferencing: The computer network generates associations by sensed likenesses (metaphors) and associations of juxtaposed unlikenesses (metonymies). This division underlies any substitution set in language; but it also is the logical prerequisite for the formation of any system out of any elements. With metaphor the justification for a connection is the similarity (or resemblance) that is sensed to exist between things, while metonymy is a means of connecting things by the notion of their temporal and spacial dissonance, by their juxtaposition. Metaphor is equated with "sensed identity." Metonymy is equated with a conceived (or perceived) difference *plus* "necessary interrelationship." Combinations and permutations generated by "entry" choices exercised by the players constitute another, separate level of metaphor and metonymy which is independent of the players' intentions. Another bifurcation: the metaphors and metonymies designed, articulated and entered by the players, *and* the metaphors and metonymies resulting from (derived from) the separate entries as they rub up against or interlock with each other without prior intention.

The second tier of metaphor and metonymy within the discourse will multiply asymptotically as the structure of the "entries" expands to include the diagram and the image with its text.

Brendan O'Regan 4/6/81

Steven's last message asks legitimate questions but sets up curious circularities of argument. It is legitimate to ask: Is our subject the means of communication? This translates to: Is the only thing we are trying to do is engage in discourse about the process of teleconferencing and the conduct of a "electronic discourse" about the nature of electronically mediated communication?

I hope not. It is one of our problems to get beyond being hypnotized by the details and fascination of the process in order to create collective understanding and agreement about how it can impact on or be a part of the art-making process.

For those who have a high level of independent familiarity with the uses of these systems, for the purpose of communication and interaction designed to achieve other goals, such discourse would rapidly take the form of discussion on the construction of appropriate means for turning this medium into a tool suitable for the creation of art—either in forms familiar to us or unknown.

Since we are at this learning stage with the present participants, there has to be a period for the mutual creation of metaphors to guide use of this system. Given the present level of familiarity with these kinds of systems, it seems inevitable that there must be a period of Type (A) which must precede a period of Type (B).

For me, however, the goal leads toward the following:

The initiation of a collective, electronically mediated mental process to explore the aesthetic implications of this form of communication. This activity should be conducted *simultaneously* with several different inter-disciplinary groups, with carefully defined overlap among them. This process stands or falls on the ability of different groups to participate in the collective nature of the medium past the point of initiation.

Steven Poser 4/21/81

Brendan's phrase "the expansion of the aesthetic text" sticks in my mind. My best guess is that this "text" is the constellation of sensibilities, concepts of what constitutes the work of art, ideas about its syntax, its mode of address to the audience, how it means, the conceptual shape and poetics of objects that would link them to a particular historical sensibility. It would include a sense of strategy, of conviction as to its formal shape and sufficiency, the sense of wholeness and meaningfulness that prompts its being put forward as a work.

Then he says that there has been no "direct expansion of the aesthetic text that both stems from and embraces the new technologies"—that efforts to date have simply "added them on as effects for reasons which emanated from the aesthetic text *before* the advent of these possibilities."

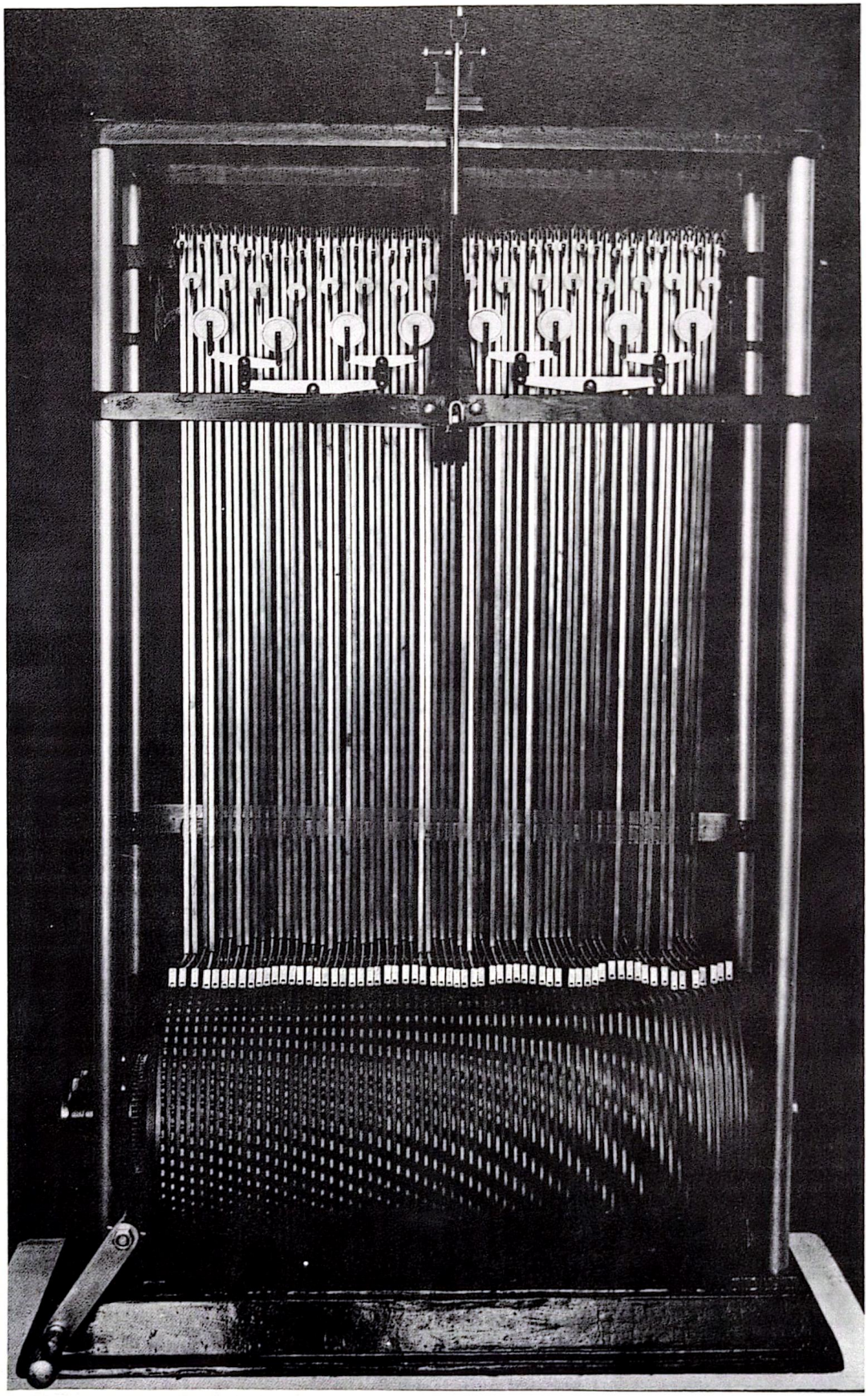
I take this to mean that, as a matter of historical fact, the uses of new technologies have been basically ornamental or pressed into the service of an extrinsic or preconceived aesthetic. The contrast is to an immanent aesthetic, one that is discovered within the medium as a consequence of investigating its specific nature and special properties. I am wary of the idea that significant advances in sensibility, in scientific model-making, and creative work generally are best thought of in terms of the medium they are expressed in. Yet acquisition of a new instrument can be catalytic in the formation of new ideas. Brendan writes that what we're doing stems from and is set directly within some of the newest technology available which makes possible a conscious expansion of the aesthetic text.

Specifically, we are involved with the means of collapsing the processes of time, space, and information. But what is the nature of the expansion inherent in that collapse?

I am interested in Bateson, for example, because within his work are the rudiments of a new picture of the psyche. If anything in history gives us a new idea of what art is, it is a new model of the nature of mind. If epistemology can be understood as part of the natural history of the human species, then we are at the access points to new ideas about art, thinking, and creative activity. Cybernetic models *will* influence aesthetics, but only a new brain can make new art.

One recent example of "expansion of the aesthetic text" is the appropriation of the context of sculpture which allowed artists to see sculptural form in processes, activities, and events extended and disembodied in time and space. This clear conceptual leap brings into existence a new object and creates a new ontology by which to "frame" new objects.

The questions we are addressing here (and I take many of Frank's entries this way) are procedural: How do we formulate, by our participation in a teleconference, a poetics of thought and interaction that gives content to new concepts of shapeliness? Are these concepts immanent in the technology or do they rather adhere to the climate of mind around these instruments? The technology seems to offer a way of reconceptualizing the realm of mind; since art-making and the total experience of art seems most like a form of thought, if our models of the mind and organism evolve, so must the ecology of art.



A precursor of the modern digital computer: replica of the Michelson-Stratton harmonic analyzer. Developed in 1898, the machine was capable of handling Fourier series of 80 terms. Fed the Fourier coefficients of a trigonometric series, it could produce a graph of the sum function and also perform the reverse process. (IBM).

Frank Gillette

Re: Proliferation of Sources 4/16/81

> "The point at which the process [proliferaton] begins, or rather at which growth begins, is the point at which ambiguity has been reached. The ambiguity that is so favorable to the poetic mind is precisely the ambiguity favorable to resemblance."[27]

> "Let us record the atoms as they fall upon the mind in the order in which they fall, let us trace upon the pattern, however disconnected and incoherent in appearance, which each sight or incident scores upon the consciousness."[28]

> "The existing monuments form an ideal order among themselves, which is modified by the introduction of the new (the really new) work of art among them. The existing order is complete before the new work arrives; for order to persist after the supervention of novelty, the *whole* existing order must be, if ever so slightly, altered; and so the relations, proportions, values of each work of art toward the whole are readjusted."[29]

> "Every image is a restatement of the subject of the image in the terms of an attitude."[30]

Re: Teleconferencing and Binary Analogs 4/20/81

Among other things there is a potential for a sub-discourse on the relative methodological peculiarities of science and art (and/or science versus art).

Kierkegaard answered Hegel by opposing the impersonal rationality of history with the irrational reality of the individual. The dynamics initiated by these antipodes (complete with the "personality traits" of each) continues to exist in the present. The teleconference "space" is the theater-of-operations in which these antipodal orientations engage each other's "texts."

"Text" is understood as a body of "data" in any sort of units or elements:sounds played, phones uttered, acts effected, colors applied, sentences written, stars contemplated, geographical features surveyed, which smack of systematization, given an observer. From such units or elements, systematically apprehended, are derived music, speech, actions, paintings, paragraphs, constellations, maps, respectively.[31]

Re: Parallels between Teleconferencing et al and Video

If our "reality" is merely a subset of all possibilities, then, in Barthes' words "techniques are developed and intended to *fix* the floating chain of signifieds in such a way as to counter the terror of uncertain signs." Video can be appreciated as the means to a radical naturalism grounded in observational method and ways of viewing. It fixes (records) specific events which are basically undifferenciated from the unrecorded (unfixed) specific events around them. By juxtaposing sets of observed events in "real time," a novel range of intentional and non-intentional associations and meanings emerges. How or why one image is "selected" over another, or how and why one image is recontextualized with another, is a matter of subjective codes and ciphers employed by the observer. The "observer" in video and the player in teleconferencing are parallel.

The "teleframe," the monitor's convex and sinosoidal screen, delivers a phenomenalist paradox with every image, whatever its content. There is an impacted spacial immediacy accompanied by a temporal anteriority (or temporal remoteness) with every synchronized duration of images. *Spacial immediacy* and *temporal anteriority,* experienced simultaneously, is the equivalent to having the sense of *being there* with the sense of *having-been-there.*

Barthes calls the photograph (and by extension: cinema and video) a "decisive mutation" of the "informational economies." "The denoted image naturalizes the symbolic message..." In video the symbolic or connotative message unfolds in real time (heard as well as seen) via subjectively chosen signs composed of angle-of-vision, focal length, orientation to horizon, frame composition. It is possible therefore to speak of the density of connotation in a given video composition. The complexity of symbolic (or connoted) elements is reflected in the flow of natural (or factual) denoted events. What is represented becomes transformed by virtue of the method or strategy of representation.

Re: Transformations Across Systems of Sensory Orders

> "...their inscription in networks of generalities infinitely articulated in the genealogies of a structure of whose crossweaving, coupling, switching, detouring, branching can never be derived merely by a semantic or formal rule..."[32]

Premise: Art and science possess radically distinct epistemic affiliations. Practices within the domain of one or the other establish a different *kind* of knowledge. Art and science represent competing epistemologies. This terminal[33] (hard and soft network) is an instrument of science. It is imbued with the perceptual bias and cognitive habits of the normally practiced "scientific method." The hunch is that art's ways and means are sufficiently protean to complement the paradox of *terminal adaptation.* "Understanding a thing is to arrive at a metaphor for that thing by substituting something more familiar to us. And the feeling of familiarity is the feeling of the understanding."[34]

Re: The Core of the Matter

> "In all human things, necessity is the principle of impurity."[35]

Teleconferencing, as currently constituted, has produced its own kind of conceptual metric. Its chief characteristics lie in the vagaries of ambivalent ebb and flow. What's going in is uncertain, and the rules for uncertainty are found in the powers of irrelevant thinking. An increase in certainty (explicit goals, minimum contingency) will be accompanied by an increase in coherent relevance. Until this threshold is established and/or synchronized, play is atomized among players and, when

present, reflects a player's own particulars which the uncertainty of the situation has drawn out. This condition rubs up against what is central to the process, the issue of identity, or a defined and expressed *modus operandi* evident in the actual text of the teleconference.

Thus far two distinct positions have emerged: the *Cybernetic Adept* and the *Bricoleur.*

The *Cybernetic Adept*'s position is clear.

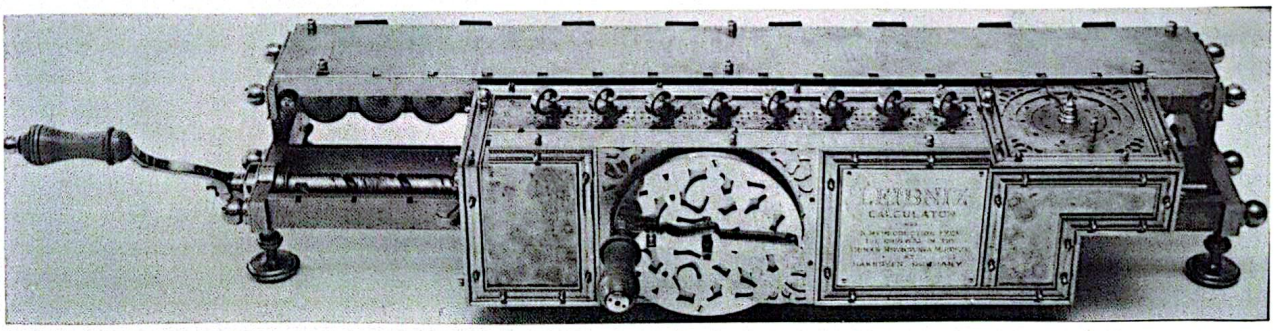
> It associates the descriptive principles of cybernetics with ideal operational methods in teleconferencing.
>
> The shift to a more complex and inclusive procedure is seen as the result of a more expanded and efficient utilization of already available alternatives or as a result of the introduction of new hardware.
>
> The *Cybernetic Adept* is alert to the nuances of change in computer and allied technologies, possessing a most sophisticated grasp of what is practicable and when. Naturally, this provides for a quick and sure grasp of what is potentially possible, given the circumstances.

The *Bricoleur*'s position is less clear.

> Whereas the *Cybernetic Adept* is direct, the *Bricoleur* throws curves, beginning with an intuition of necessity that originates in the actual experience of the terminal sending/receiving entries.
>
> Its working hypothesis is that the "network" creates a field of metaphoric interconnections apprehended as an intangible theater-of-operations whose limits and boundaries are unknown, but knowable.

NOTES

[1] Re: Saussure, Sapir, Jakobson
[2] Re: Eco, Jakobson, Hawkes
[3] Levi-Strauss
[4] Jakobson
[5] Re: Jakobson
[6] Brendan O'Regan (in computer message)
[7] Wallace Stevens
[8] Cezanne
[9] Jeremiah 10:9, 5:14
[10] Wallace Stevens
[11] Levi-Strauss
[12] Aristotle
[13] Gilbert Ryle
[14] Kenneth Burke
[15] Colin Turbane
[16] Jakobson
[17] Terence Hawkes
[18] Barthes
[19] Julia Kristeva
[20] Talcott Parsons
[21] Paul Cheney
[22] Levi-Strauss
[23] Panofsky
[24] Derrida
[25] Geoffrey Hartman
[26] Kenneth Burke
[27] Wallace Stevens
[28] Virginia Woolf
[29] T.S. Eliot
[30] Wallace Stevens
[31] Re: Levi-Strauss, Boon, et al
[32] Derrida
[33] Terminal: Texas Instruments model 765 with bubble memory (see photograph)
[34] Julian Jaynes
[35] Simone Weil



Leibniz Calculator (IBM).

Book Review

JOHN VON NEUMANN AND NORBERT WEINER

From Mathematics to the Technologies of Life and Death

Steve J. Heims
The MIT Press

David Finkelstein

Childlike, greedy, flowering with mathematical beauty, they are heroic figures of twentieth century mathematics. This major dual biography treats of their mathematics, their Jewish roots, and the influence they exerted through the applications of their work, ranging widely through mathematics, physics, armaments, neuro-science, and philosophy.

Why a dual biography? Perhaps because the crossings and partings of their lifelines show their individualities better than a single biography would. And certainly because Heims wants to contrast the two men to make his point. The book has an agenda. His narrative and his quotations from their works and conversations work towards that agenda. Again and again, to be blunt, Heims tells us that Wiener keeps the faith, von Neumann sells out.

This view comes as a shock to me. I too have made choices between Wiener and von Neumann, and when matters of science were involved I usually chose von Neumann.

The first such decision occurred in my first year or two of college. The texts I found on quantum mechanics were sheer walls without fingerholds for my understanding, even after I learned from them how to solve elementary problems. After weeks of frustration I was overjoyed when I chanced on von Neumann's paper with Garrett Birkhoff, "The Logic of Quantum Mechanics," where quantum evolution is ascribed—reduced, some would say; elevated, I felt—to an evolution in the laws of logic. Einstein drops one of Euclid's postulates. Bohr, says von Neumann, drops one of Boole's. Sitting in the high-ceilinged college library—long since razed and replaced—I formed a joyous surmise: Perhaps my job was to explore the physics of these new logics. I resolved I would emulate Einstein's exploration of the physics of the new geometries. Armed with Langenscheidt's German-English dictionary, I fought slowly through the dense German of von Neumann's book on quantum mechanics, rejoicing whenever I arrived at a comprehensible paragraph.

I saw Wiener at a distance and met his thinking more closely when I reached graduate school. Walter Harry Pitts, his research associate and protégé, a figure in this book, lightened those heavy years for me more than any other faculty member. I met Pitts when I took his course in the mathematics of quantum theory. When he hit a snag on the blackboard, he would reach over the top of his head with his right hand and scratch his left temple as he puzzled. We walked miles along the Atlantic shore, he sampling the shellfish and explaining their functioning as we walked. Sometimes he cooked a dish for my wife and me in our one-room apartment on Beacon Street. Years later, not long before his death, I tracked him down to a dim cafe he frequented in Harvard Square, to thank him and re-establish contact. He sat alone reading, frail and withdrawn. Pitts did not remember me, and when I said my piece and left him to his book, he seemed relieved. I have not studied his neural nets in years but I still use his recipe for fried spinach. I wish Heims had captured his engaging personality.

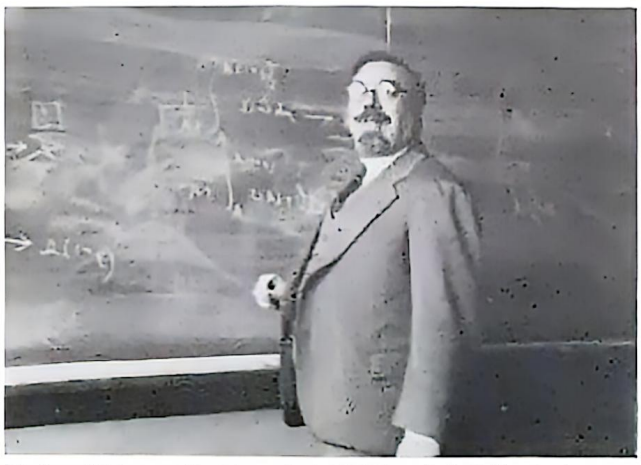
Wiener thought differently about quantum theory than von Neumann. For Wiener, quantum jumps were like the dance of shining dust motes in a sunbeam that, I recall, held me for hours when I was a child, as I tried to catch a scintillation between thumb and slowly, slowly descending forefinger, always in vain. This dance is called Brownian motion. His probability methods worked for Brownian motion, and Wiener felt they would work for quantum jumps. The seeming randomness of Brownian motion is not basic but results from many variables hidden from our perception, particularly the atoms surrounding the dancers. Wiener was convinced the randomness of quantum theory too would result from hidden variables.

Wiener's conviction must have been only strengthened by the viciously circular but widely quoted proof of von Neumann, that hidden variables could not account for quantum incompleteness. This famous proof is given in von Neumann's book on quantum theory, and shows that knowing as much as quantum theory allows about the past always leaves some (in fact most) questions about the future unanswered. It does not address the question that interested Wiener. What if one knew more than quantum theory allows?

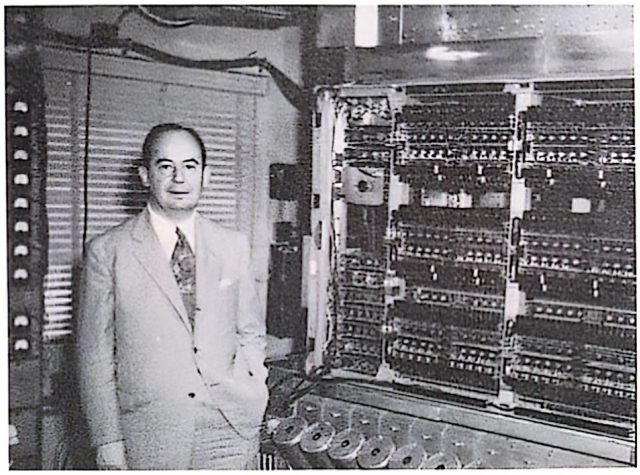
Acting on his conviction, Wiener buttonholed prominent physicists at MIT and forced them to consider hypothetical transgressions of the laws of quantum theory. They took these laws for granted, in the way a shoemaker takes his awl for granted, and Wiener kept them from their proper work. Desperate, they decided to sacrifice a maiden to the Minotaur. A physics graduate student might sate Wiener's appetite for physics and buy them peace. Clearly the transaction would benefit all involved, especially the graduate student.

The possibility of working with the celebrated Wiener was tempting but I did not apply. Today I can say why more clearly. My inaction might be called a choice between Wiener and von Neumann, and has to do with quantum theory and the celebrated Einstein-Bohr dialogue.

In their dialogue, Einstein and Bohr agree at the outset that quantum theory does not predict our future experiences from our past ones, and in that sense is *incomplete*, but disagree about whether such an incomplete theory may be the most informative that is possible, and in that sense may be *maxi-*



Norbert Weiner at blackboard. (MIT Historical Collection).



John von Neumann standing by fully automatic, digital, all purpose computing machine built by team he lead at Institute for Advanced Study in Princeton. (Courtesy, Institute for Advanced Study).

mal. Einstein, here playing the role of classical thinker, laments that the theory is poorer than nature. Bohr, the modern existentialist, is content that nature is richer than our theories. Einstein repeatedly attacks, Bohr successfully defends, the internal consistency of quantum theory.

I felt with Einstein and Wiener that quantum theory had to be replaced, but also that first, one had to grasp the new thing it brought into physics, and preserve that. Now the new thing about quantum theory is not incompleteness, its failure to make exact predictions. Classical Brownian motion shares that, as Wiener noted. It is that while previous theories, including Einstein relativity, dealt with uninvolved objectivity, quantum theory dealt with involvement. Incompleteness is only one aspect, a negative one, of involvement. This was expressed in various forms by Bohr (for whom the observation of a quantum phenomenon was part of the phenomenon observed), by Dirac (who formulated mathematically a generalized relativity principle for quantum theory, his transformation theory), and by von Neumann (whose expression was the most abstract and mathematically complete). Involvement leads to an extension of relativity from the categories of time and space to those of logic. The descriptors meaningful for a quantum system depend on its context in a way that is explicity denied in classical Aristotelian logic. Einstein allowed for changes in our description of facts with changes in our relation to the system observed, but Bohr allowed for changes in the very totality of accessible facts.

An artist walks around a model, tries one perspective, another, then returns to the first. Nothing seems to have changed. With each relation between artist and model goes a portrayal of the model. As soon as one artist leaves a perspective another can assume it. Many artists can use the same model, with little interference. Einstein's theory deals with this kind of objective relation between observer and observed.

The next day the artist comes nearer, perhaps to study sheen and texture. One thing leads to another. In brief, the artist seduces and is seduced by the model. If we insist, we may say the artist has a new perspective, but it is better to say the two have become involved. This change of relation is not undone or shared as easily as a change in perspective. Quantum theory is a theory of involvement.

Einstein never bought this extension of Einstein relativity by Bohr, from time and space to logic itself. Einstein never considered quantum jumps basic; he thought they were determined by a nonlinear unitary field theory, like catastrophes in the sense of mathematician René Thom. Wiener did not think quantum jumps were basic; he thought they were determined by hidden variables.

But Heims sees it otherwise: He notes that Wiener described quantum theory dialectically, as a Hegelian synthesis of particle thesis and wave antithesis. He points out that von Neumann regarded the interface between the observer and his instruments as classical in its nature, so that the readings by the observer could be regarded as objective.

Heims is accurate on both points and both are irrelevant. Dialectical materialism, curiously, is often linked with uncritical faith in absolutist theories like Newton's mechanics and Aristotle's logic. (See Engels on Newton's mechanics.) The philosopher who will pit his philosophy against the current physics is rare and rarely right. (But see Blake and Bergson on Newton's mechanics.)

And the critical interface is not that between observer and instrument mentioned by Heims, who has misleadingly isolated part of von Neumann's discussion of measurement in terms of a tripartite observer + instrument + atom system. It is not *that* interface, which had better be classical, but the one between instrument and atom where quantum effects control. Von Neumann treated both interfaces correctly enough.

We may prefer Wiener's ethics, but we should respect von Neumann's quantum theory. With all its defects (and Heims mentions the greatest: the assumed simultaneity of the measurement process, a discord with relativity) it has worked best for over half of a dynamic century, without any change at all. The latest speculations on the color and flavor of quarks still trim themselves to the Procrustean bed of von Neumann. It seems to me that Heims actually interchanges the attitudes to quantum theory of Wiener and von Neumann, when he finds Wiener radical and von Neumann conservative on that subject.

Heims also considers von Neumann formalistic. He finds von Neumann cared less about the meaning of his axioms than about their mathematical form. This does not make sense to me. For example, von Neumann's axioms for set theory, and likewise his axioms for a cellular automation, are ugly and clumsy, though seminal and famous, because in them he tried to express something that other mathematicians were not to take up for decades. In his set theory, dissatisfied with the static idea of the set, he attempted to take as basic instead the more processual idea of the transformation or mapping, at whatever cost in elegance of form. His abortive attempt prefigures the modern work in category algebra. Von Neumann never went to the operational meanings behind his symbols in the way characteristic, say, of the young Einstein;



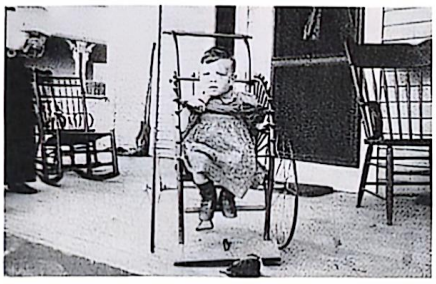
Walter H. Pitts (MIT Historical Collection).

few ever do. Nevertheless, von Neumann exceeds the patience of most of his physicist readers in his treatments of epistemological questions of meaning and measurement. He left his personal mark on all the domains of applied mathematics, and became a master at the use of mathematics as a language with meaningful content.

This makes his errors the more conspicuous. He as much as anyone introduced the concept of the collapsing state into quantum theory, and this concept is inconsistent with his own recognition that individual quantum systems have no state. There is a subtle trap—call it symbolatry for short—sometimes concealed by beautiful mathematics, the implicit and therefore incontrollable assumption that there is a natural isomorphism, emotionally an identity, between symbols and actuality. Sometimes as here von Neumann falls into this trap, as Heims

Below from left to right: Norbert Weiner as baby in old fashioned baby stroller. In China, 1935; in Japan, 1935; with Mathematical Society of Benares, India, 1935; at Leningrad Institute for Experimental Medicine, 1961; honored at White House by Lyndon Johnson, 1963 (Jerome Weisner, N.W., unidentified, Vannevar Bush). (all photos from MIT Historical Collection).

Opposite from left to right: In 1952, Claude E. Shannon of Bell Laboratories devised an experiment to illustrate the capabilities of telephone relays. Here, an electrical mouse finds its way unerringly through a maze, guided by information "remembered" in the kind of switching relays used in dial telephone systems. (Bell Labs). *Saturday Review* cover (MIT Historical Collection). Robert Oppenheimer and John von Neumann at Institute for Advanced Study, Princeton. (Courtesy, Institute for Advanced Study).








notes. Pioneering has its hazards. It takes much longer to forget an old language than to learn a new one.

The end of this dialogue is not yet in sight. There may well be a point of view that reconciles the discordant views of Einstein (and Wiener) with Bohr (and von Neumann). If we compare them with the assertions of quantum theory not the objective ones of classical mechanics, but the self-referential ones, the hard line between the two kinds of theory begins to soften.

Self reference would be one of the major mathematical motifs of the century if no one but Gödel had played on it, but it permeates the mathematics of Wiener and von Neumann too, with a characteristic difference. For Wiener, self-reference took the form of self-regulation, for von Neumann, self-replication. Thus Wiener was led to invent cybernetics, a theory of communication, control and self-regulation in animal and machine, to make his actions and those of other scientists matters of conscience, and to decline power. Von Neumann, on the other hand, developed a theory of reproductive automata that foreshadows remarkably the actual genetic mechanism, assisted mightily with the automatic computations for nuclear bombs, and entered the circle of the power elite. The narrowness of his understanding and concern is measured by his statement (with Morgenstern) that "the typical problems of economic behavior become strictly identical with the mathematical notions of suitable games of strategy"—another plunge into the same trap of symbolatry.

Heims is concerned with mathematics and physics mainly as background to the actions of his people in and after World War II. (He calls that war a watershed, but surely he means a divide.) Wiener works at MIT on defense against air attack; von Neumann works at Los Alamos on the nuclear bomb. Both find their tasks require them to develop precisely the kind of mathematical structures they most love,integral differential equations for Wiener, logic systems for von Neumann. Wiener involves himself in protest against the Nagasaki massacre, considers never publishing again to avoid abuse of his work. Von Neumann separates himself even from the *Bulletin*

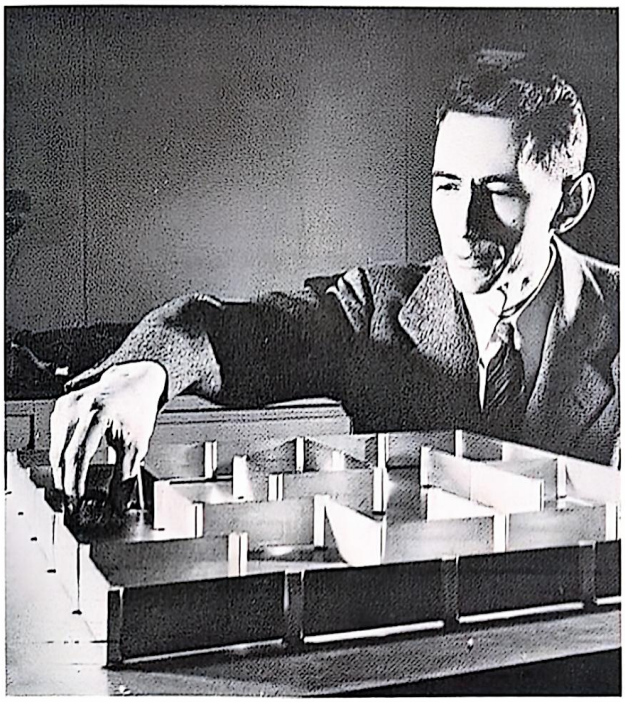
of Atomic Scientists, a mildly anti-military voice, rejecting two invitations.

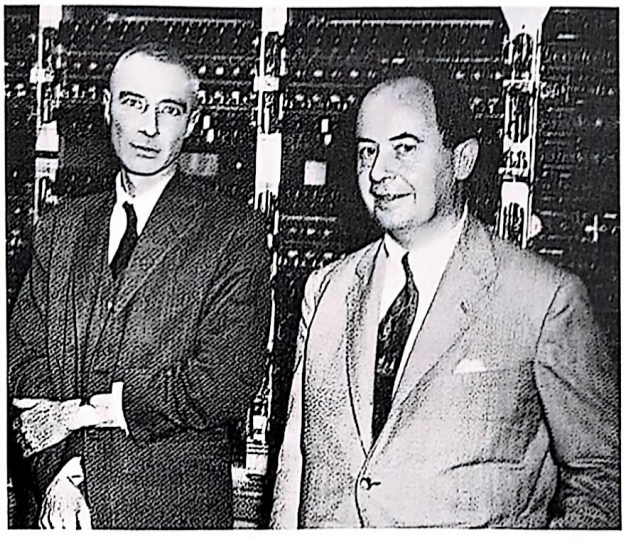
Von Neumann, with his middle-European Jewish origins, was alert to the danger of Hitler and Stalin before most of us, just as he was more conscious than most of us of the inadequacy of the computer as a model for the brain or the world, thanks to his involvement with such machines. I suppose that for him it would have been the greatest immorality *not* to arm the United States to the teeth.

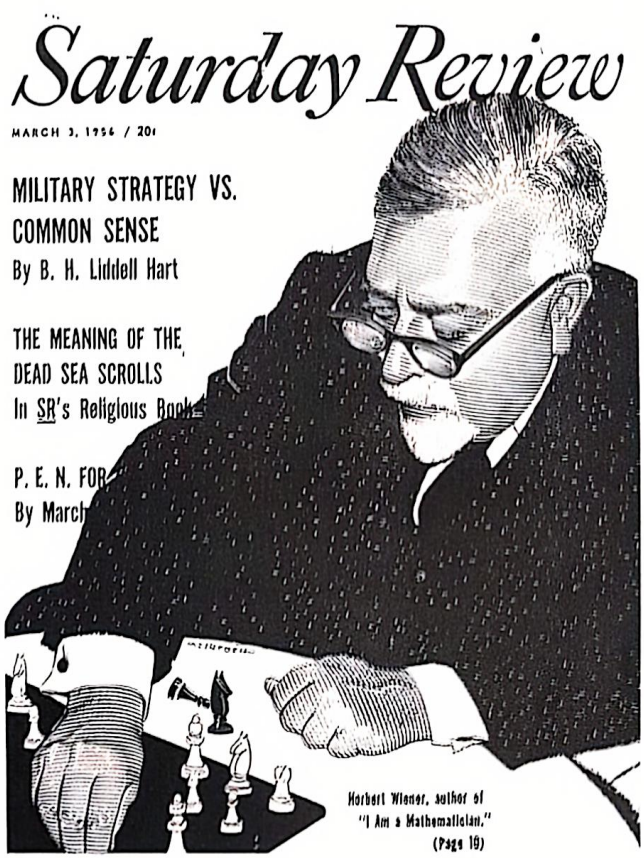
Heims regards von Neumann's haste to build bombs and super-bombs, computers and supercomputers, as another case of the widespread faith in the machine, the epidemic addiction to the technological fix. The trap of a superstitious belief in hardware—technolatry?—sits right beside the trap we have already noticed, which might be called a superstitious belief in software, and both wait for anyone who identifies the world with a computer, as the very analysis into hardware and software requires.

Heims' agenda surfaces in the epilogue. Like Noah, he does not take the continued survival of civilization for granted. Perhaps he sees that all nations have access to nuclear explosives limited only by budget (and an occasional Israeli sortee); that today cities are held up for ransom as yesterday airplanes were, and tomorrow nations will be; that biological weapons are or will soon be less controllable, cheaper, more insidious, and deadlier than nuclear. Heims' main concern is how we are to survive this evolution of our technology of death. His agenda consists of actions for such survival.

The Los Alamos team were as much slaves as masters of the nuclear genie. They could not keep him in his bottle forever,







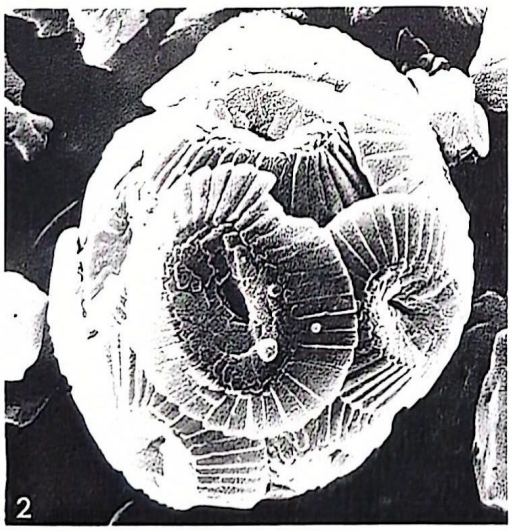
they could only help him out. Had only they exerted a wiser influence over the time and place of his dreadful emergence! Heims draws from their success and failure conclusions on how to fight against repetitions of that history. Action groups, a concern for wholeness, whistle-blowing—he pulls together many of the most hopeful developments of the last two decades. We are baby scorpions in a bottle and our stings are growing. If we survive long enough to escape our bottle, we must evolve into a community, and soon.

There is an element of irony in their deaths. The mathematician of self-regulation died of heart failure. The mathematician of self-replication died of cancer. From their lives Heims has made controversial and provocative ammunition for the movement for a viable world. He has deepened and shifted my perception of Wiener and von Neumann. He has made fresh the old dictum that intellect when divided from heart and soul and body breeds monsters.

A CRITIQUE OF THE DOMINATION OF NATURE

Trent Schroyer

> I wish to speak a word for Nature, for absolute freedom and wildness, as contrasted with a freedom and culture merely civil—to regard man as an inhabitant, or a part or parcel of Nature, rather than a member of society. I wish to make an extreme statement, if so I may make an emphatic one, for there are enough champions of civilization ...
>
> Henry David Thoreau



Late Cretaceous to Pleistocene Cocoliths from the North Atlantic.

Initial Report of the Deep Sea Drilling Project (volume XII supplement to volumes XXXIX, XL, XLI). A project planned by and carried out with advice of the *Joint Oceanographic Institutions For Deep Earth Sampling*. Prepared for the National Science Foundation by the University of California (Scripps Institution of Oceanography). U.S. Govt. Printing Office.

Since the 17th century, modern science has seemed confident that the human species is independent from organic nature.[1] Universal knowledge of inorganic structures provides an ever refined system of techniques that (supposedly) separates us from nature in an irreversible manner. Socio-technical evolution step by step transforms all in-built human capabilities in a cycle of technical learning that creates tools that are reinforced till they become machines and are finally replaced by automatic systems. This behavioral cycle of feedback-guided learning is an artificial world construction process that is unconsciously determined by the human need for security and safety.[2] The irony is that more control over nature does not seem to decrease anxiety about the terror of nature.

While a sense of the inevitability of socio-technical progress pervades modern culture, so too does a sense of a "broken connection" with biological and cultural continuity. The nuclear image of possible human annihilation, and the permanent "crisis" ethos of contemporary societies, meld together to require what Robert Lifton has so aptly called "psychic numbing." Hence, the fear of survival returns and the search for symbolic immortality (began perhaps with the fall from the ignorance of death) renews the quest for a technical transcendence of nature.

But a "dialectic of enlightenment" has plagued this quest since the beginning in that each renewed level of technical learning requires greater sacrifice and renunciation in the development of self-hood at the cost of greater losses of the capacity for spontaneity, participatory solidarity, and imaginative participation in nature. The technically determined separation from nature has ironically undermined the stability and coherence of the human world; technical progress and loss of cultural form are simultaneous processes. At stake are the dreams of the modern enlightenment; reaffirmation of religious orthodoxy as the only cultural cement is the neo-conservative sedative.

Into this matrix of despair is slowly surfacing a potential power that recalls the slumbering memory of the behemoth. Awakening from a sleep induced by the modern epistemological principle that "nature-in-itself" is constituted only as an object of technical control, *Gaia,* or the organic unity of the earth, appears to some observers who have an interest in human technical *hubris*. Rather than dead matter in motion according to universal laws, recent scientific discoveries (renewing old beliefs) suggest an internal self-organizing formative activity within natural events. In so far as this is true, Western rationality, which begins with the total transcendence of nature, may be encountering its decisive trial. Efforts to drain all immanent formative activity from nature, to smash all pantheisms, were justified in the West as essential for sustaining the ego-autonomy essential for civilization. Today ecologists everywhere begin to suggest that the "good-for-nature" should inform our ethical mediations of technical progress. Ethical norms are then emergent from both the interdicts of culture (*nomos*) and from the limits of nature (*physis*). Maintaining a balance of these two sources of normative integration requires a type of critical insight which the ideologies of progress today seem to lack.

But the problem may not be "progress" as a socio-cultural ideal. Indeed there is one learned argument that "progress" was central to classical antiquity in the West from the very beginning.[3] But "progress" here meant growth of an organic whole that exhibits persistence and change, identity and difference. The model of nature was cited as exemplary; Seneca

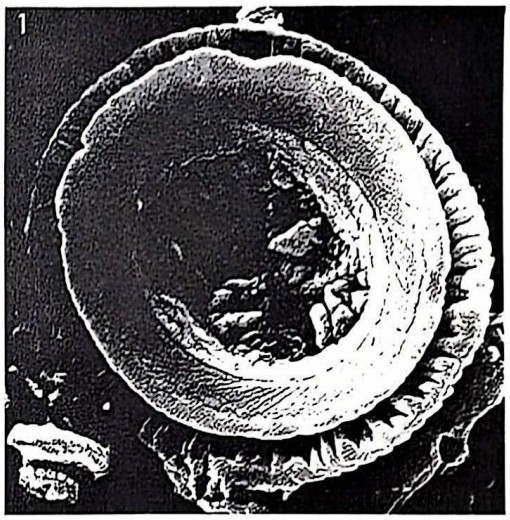
could thus say: "Nothing is completed at its very beginning." Harmony seems to require an ongoing insight into the unity of nature and culture, *physis* and *nomos*. Hence, recent scientific theorizing points a way out of modern mechanical materialism and suggests new possibilities for "man"-nature interaction.

The word "nature" (*physis*) in its Greek origin comes from *phyein* meaning to grow out of, to appear by itself. Nature is that which is somehow identical with the process through which it appears and comes into being. Nature's movement is self-moving flow. A new discovery of this appearance is suggested by David Bohm who claims that we need to look on the world as an undivided whole. The new form of insight into nature's being can best be called undivided wholeness in flowing movement. The view implies that "flow" is in some sense prior to that of the things that can be seen to form and dissolve in the flow. According to Bohm's interpretation, a new order of nature is coming into focus. Bohm argues that the evolution of physics has moved beyond the order of Galileo and Newton (the separability of the world into distinct but interacting parts) to a new scheme of the continuity of fields (in relativity) and the inseparability of the observing instrument from what is observed (in quantum mechanics). The new order implied is that of a *holographic enfolding of the information about the whole into each part.*[4] Instead of the classical Cartesian-Newtonian explicate order (where each part has its own place outside of others), the new implicate order has enfolded information about the whole in each part. The difference is that between an image of nature as a composite unity and a *holographic order.*

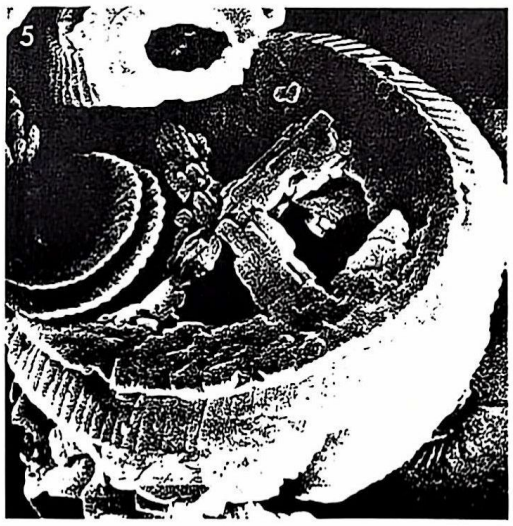
While it would be possible to recall that archaic worldviews also held to a holographic presence of the whole in each part,[5] the more relevant point here is that awareness of co-present elements returns as a center of physical inquiry and supplements the present analytic abstraction of a composite or explicate order. A new scientific theory implies a new practice interaction with nature. The *search for patterns that connect us* with natural eco-systems constitutes a re-orientation of scientific-technical learning. As Gregory Bateson has argued, a communicational science is concerned with the meta-relationships of events in contexts, while a strict causalistic science focuses upon the reality of "objects" while excluding contexts.[6] This defines an epistemology change from Galilean "resolutive compositive method" to an organismic approach.[7] It also forces us to re-evaluate the modern belief that we are separate from nature.

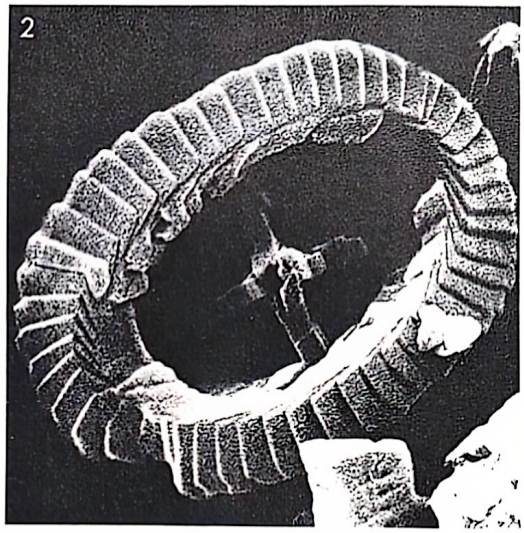
Something like a forgetfulness of our immanent participation in nature has accompanied the celebration of technical transcendence since the 17th century. Belatedly I see that Hannah Arendt's distinction of work and labor has an implicit philosophy of nature that is compatible with this changing image of nature.[8] The notion of "labor" reminds us that the life process imposed on us by our bodies, also ties us into the recurrent cycle of all biological life. In the human metabolism with nature labor mediates by an endless incorporation of matter and energy into the body (consumption) and the endless housekeeping which redirects the processes of growth and decay and maintains the human world against the intrusions of nature (e.g., pollution, excessive growth, etc.).

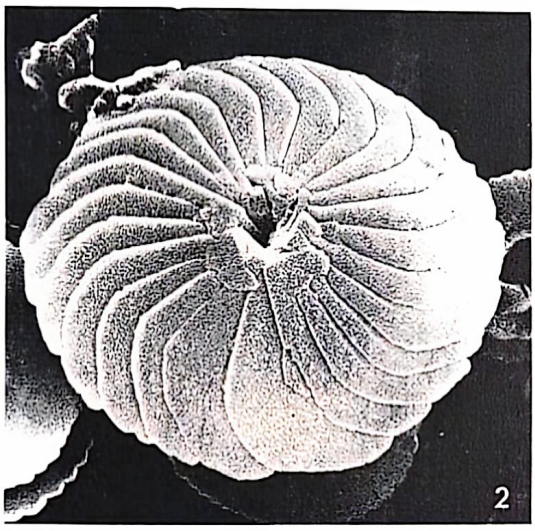
In this sense the constitutive idea of modern ideologies (capitalist and socialist) that freedom begins beyond the limits of necessity abstracts from our immanence in organic nature. Both Marxist socialism and economic liberalism share the utopian presupposition that freedom is possible only as a function of emancipation from necessity. While the ideology

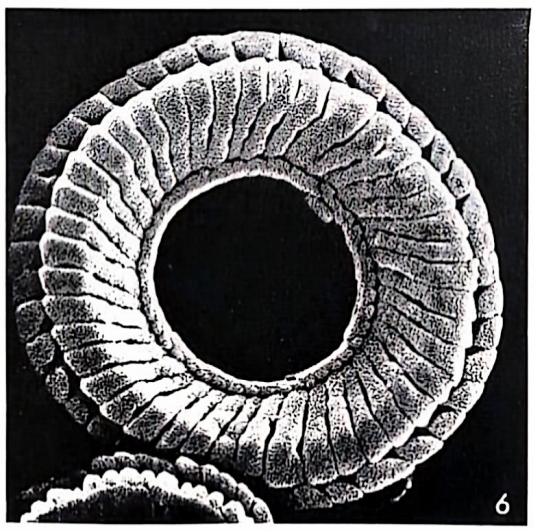












of free enterprise rests its case upon an ongoing revolution of progress (i.e., economic growth stimulated by ever new levels of technical control over nature), Marxist socialism views class struggle as a dialectical self-positing that releases the suppressed technical powers of production. Both are variations within a common perspective. That perspective is the belief that all future human possibilities depend upon an extension of the domination of nature.

Whereas progress as permanent revolution runs up against the finitude of resources and socio-cultural deterioration in a society where stability can be achieved only through expansion, socialism runs into the authoritarian contradiction of separating the administration of things from the democratization of need interpretations. Both ideologies are latent theologies of technical transcendence of nature and both promise a delusory form of human emancipation. Remembering the residual moment of the human condition in which we remain embedded in nature also forces us to question the tenability of those elements of progress ideologies that promise emancipation from labor—namely, consumerism and the superiority of "socialized" production. The question of what is more rationally produced by individual households, communities, and regions is evaded by techno-economic elites responsible for *centralized* decision-making. But more basically the hyperstimulated expectation that new controls over nature provide new freedoms from nature is the cultural mechanism that transfigures needs, and reinforces dependency upon centralized authority. How to create and select those forms of technical innovation which are compatible with organic nature and with non-dependency is the project of defining an ecologically rational form of social development. In the present context of centralized production systems, the question not systematically confronted is how to increase individual and local participation in production in order to achieve greater flexibility in our harmonization with the limits of organic nature. Only a democratization of technical learning that increases diversity within natural eco-systems (reversing the disastrous current trends toward simplification) can promote a concretely universalizable increase in the flexibility of the societal-natural interface. Until we can begin to develop new problem-oriented scientific inquiries into the carrying capacities of eco-systems, optimal design integrations of "man"-natural habitats and a systematic return to a "communicative" orientation to nature (cybernetically the substitution of information for hardware), we will not have the democratization of technical learning essential for sustainable forms of human survival.

II

Hannah Arendt has noted the sense in which modern science began by viewing nature from a perspective outside the earth. At the beginning of modern science:

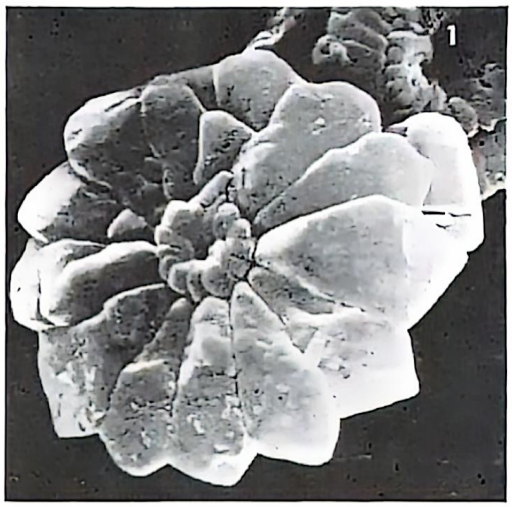
> ...the old dichotomy between earth and sky was abolished and a unification of the universe effected, so that from then on nothing occurring in earthly nature was viewed as a mere earthly happening. All events were considered to be subject to a universally valid law... (which) was valid beyond the reach of human sense experience..., valid beyond the reach of human memory and the appearance of mankind on earth, valid even beyond the coming into existence of organic life and the earth itself.[9]

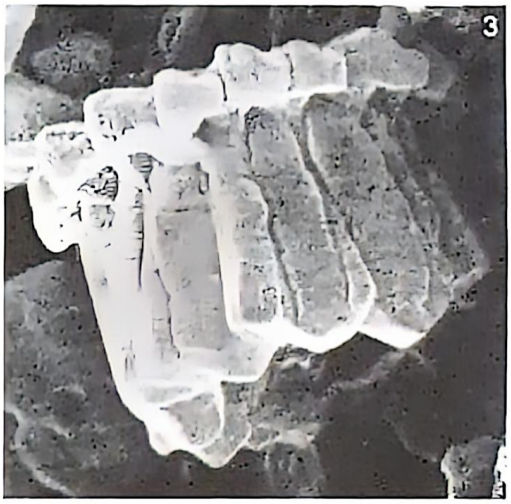
With modern science a cultural conviction emerged that the human species had established itself as "universal" beings

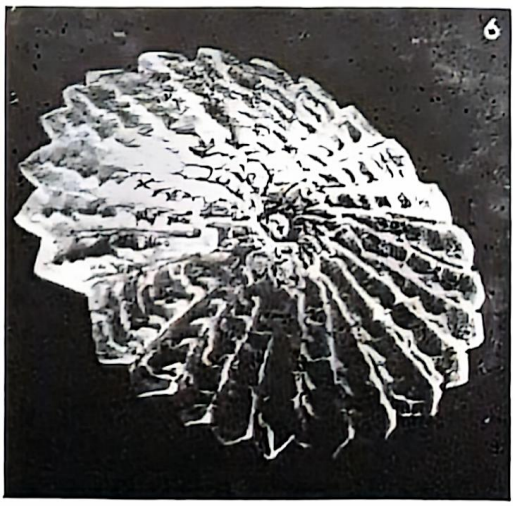
who could reason beyond the limitations of terrestrial existence and use cosmic laws for the guidance of terrestrial actions. Arendt calls this belief in technical transcendence of the earth, which is so fundamental to modern science, "earth alienation" and sees it as the most fundamental revolution of modernity. With the transition to universal science, terrestrial and celestial phenomena were unified mathematically as physics and astronomy. Newton's synthesis was made possible by the algebraic treatment of geometric relations without regard to the age-old distinction of earth and sky. With this mathematical formalization, the last vestige of terrestrial qualitative difference was abstracted away.

Yet the "universalism" of Cartesian-Newtonian mechanics may be an abstractive fallacy for bio-social forms of organization to the extent that a contextless infinite framework is presupposed. Bio-social events have context specific causalities that differ fundamentally from the linear irreversible causalities of classical mechanics which holds that action and reaction are equal and opposite or that like causes create like effects. Classical mechanics provides predictive knowledge where a system can be considered closed and energy transformations viewed as irreversibly tending toward dynamic disorder (e.g., heat processes under the entropy principle) but such analysis abstracts from any contextual constraints (organizational information that reacts back or amplifies causal impacts).

Although the emergence and evolution of cybernetics since the Second World War has developed a critique of mechanical causation, a more generalized theory has recently added an alternative to classical mechanics and equilibrium thermodynamics. Contemporary non-equilibrium thermodynamics (e.g., Ilya Priogogine's theory of dissipative structures)[10] adds another dimension to our understanding of emergent evolution in that biological processes exhibit deviation counteracting causalities that maintain non-equilibrium structures that are highly improbable. Biological organisms can maintain fluctuating structures within *limits* of contextual information patterns (e.g., homeostatic regulations). Such structures subsist against entropic decay, actually increase their complexity, and generate new *self-organizing* heterogenity.[11] This new perspective shows that instead of random disorganizations, the outcome of bio-social events depends upon the stability of dissipative structures within the limits of contextual organizational information. Similar conditions do not necessarily produce similar results. Systems that are open to their environment for matter-energy exchanges may tend toward an equilibrium—but they may also, due to more comprehensive integrations, jump to a higher energy flow-through. For example, successional change in eco-systems demonstrates how interacting life forms can create more integration of the system and more (non-hierarchical) differentiation of the food chains. The mature eco-system has greater diversity with greater capacities to accumulate and re-use resources. This movement, from fragile simplicity to complex and more stable diversity, exhibits a successional transformation from quantity as growth principle to quality as principle of structural stability.[12] Such successional transformation brings into the organization of the eco-system more organized inter-connectedness—that is, more contextually operative patterns of reciprocal causation that enable energy-matter transformations to realize optimal spatial organization. In this sense the eco-system, due to its own *informational structure* creates its own morphic genesis within that context. The patterns of this morphogenetic structure are presented within terrestrial *appearances*—represen-







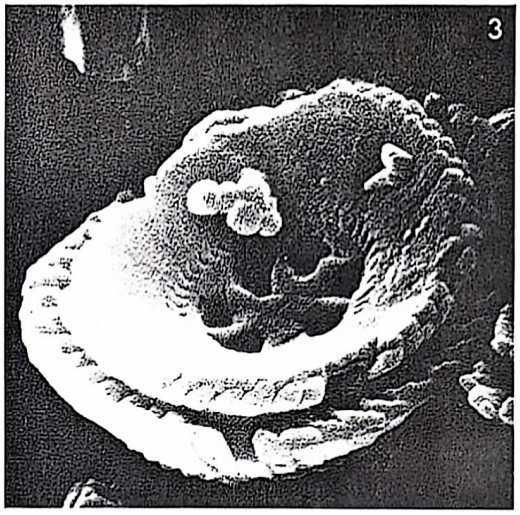
tation of this order within universal physio-chemical formalized language is possible but the *genesis* would be lost.[13] A complementarity of natural science approaches to, at least, terrestrial organic systems is suggested.[14]

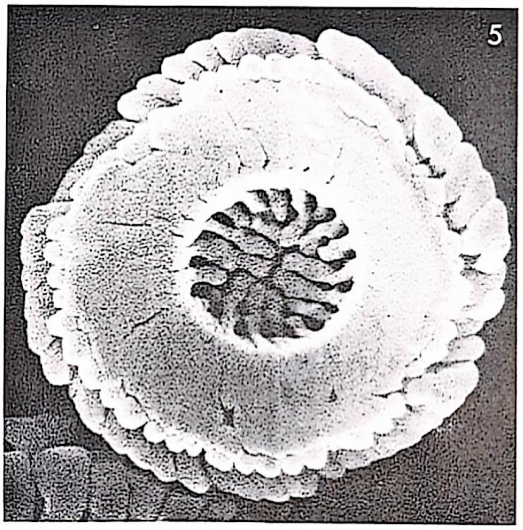
A complementarity of analysis is, of course, what Gregory Bateson suggested by his distinction between entropic ecology (bio-energetics) and "communicational," or negentropic ecology.[15] Awareness of relations, patterns, interactive forms, symmetries, etc. is essential for recognition of how natural processes are transformed in *time*. Understanding the *genesis* of context-specific organizational forms is necessary if the static world of mechanics, or the random decay of structures, is *not* the sole basis for a universal physics. Indeed if we take these physics of a static world seriously, time is only a parameter of the four-dimensional geometry called physical dynamics. Although the second law of thermodynamics (the entropy law) can be taken as defining a general trend in collections of atoms, molecules, etc., there are some implications that point beyond such an order of nature. For example, it differs from the "composite unity" notion of natural order (the microscopic building block image) by referring its cognitive claims to *the patterns* of collectivities of objects. But more interesting in a world of spatial events, it refers to a temporal *irreversibility* of processes—especially on the macroscopic scale, and especially in the sphere of "biological-space" where highly improbable (in dynamic terms) non-equilibrium structures are situated in wider contexts. Hence, the theory of dissipative structures suggests that the physics of dynamic spatial events is not complete and requires the complementarity of an analysis of irreversible structures too.[16]

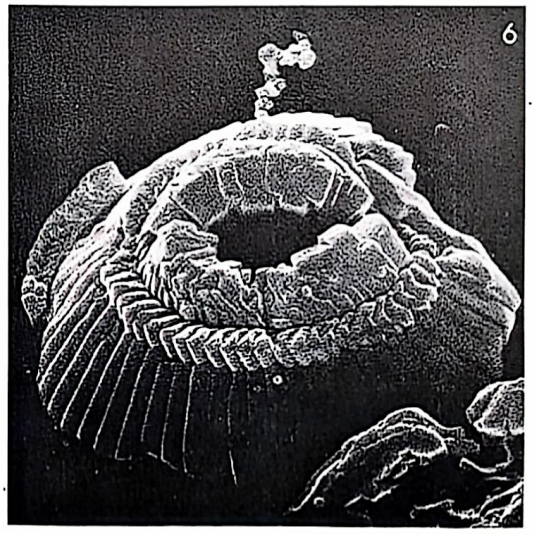
The implications of this effort to extend theoretical physics has resulted in the Nobel Prize (1977) for Ilya Prigogine and its technical import is to define a new scientific revolution that the future will explore. But an implication that is relevant here is that it has broken the epistemological frames of modern science and suggests that Whitehead's insights were basically on the right track. The study of nature itself has led to an insight into the "evolutionary" horizons of natural processes in themselves; the pre-theoretical sense of future and past turns out to be a more adequate model of "time's arrow" than the cognitive representations of the physics of classical mechanics. "Time" is not just a subjective illusion of an anthropomorphic observer but a property of dissipative structures. The scientific myth of the "infinite" universe of matter in (determined) motion is broken—suddenly a new nature appears where self-organizing innovations are always possible. The game of natural "process" is not completely representable in the abstractions of physical dynamics—bifurcations and instabilities within macroscopic nature forces an end to the imposition of geometrical spatialization of events, and concentrates our attention upon the *genesis* of organized, functionally integrated, organic forms. Recognition of pattern formation cannot be constructed from instrumental measurements alone but requires also a time dimension—a *morphogenetic* reconstruction.

The human encounter with nature is no longer representable by an instrumental interest in nature. A more complex dialogue with "nature" is essential in that both pattern formation and limits of dissipative structures fluctuations must be known to understand development.

Theoretical physics now suggests that the organic cannot be reduced to the fundamental "primary" laws of the inorganic; "secondary" laws (i.e., non-equilibrium thermodynamics) seem equally basic. It is no longer possible to postulate







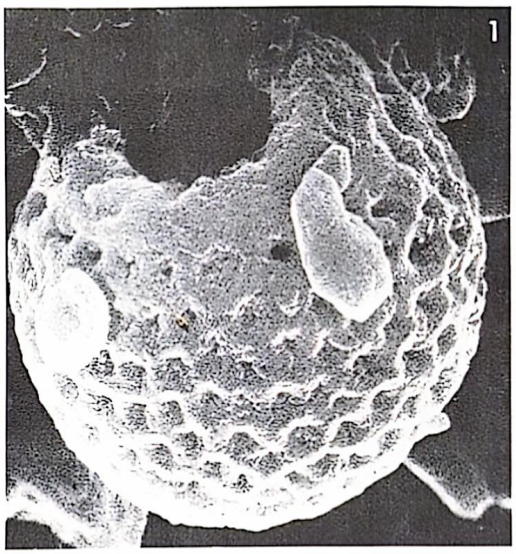
that the rate-processes of trajectories (for macroscopic) and wave functions (for microscopic) are sufficient in themselves and they must be studied in conjunction with the developing world of dissipative and morpho-genetic structures. Such a complementarity will go into the very foundation of theoretical physics itself—as well as be duplicated at every "level of organization" within a self-organizing universe.[17]

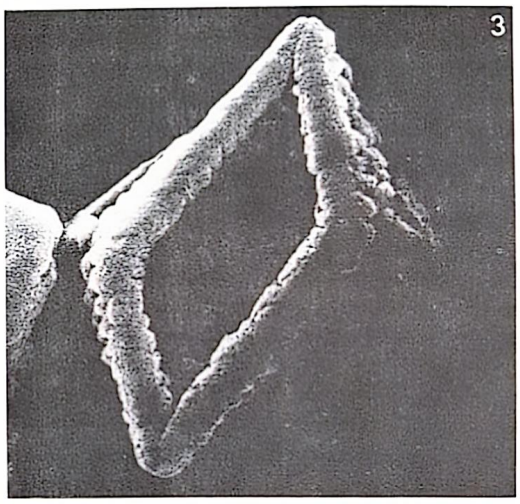
For example, the genesis of morphic patterns (or the generation of spatial forms) is accessible to description by the methods of holistic biology or ethology and yet these descriptions may use data created by formalized measurements of energy-flow, etc. Thus, descriptive reconstruction of contextual patterns of homeostasis or other more complex forms of self-organizing orders, "morpho-genesis," is possible. But such contextual patterns can be viewed as created by the interaction of forms of life striving to maintain themselves in context. Such morphic forms of organization display a patterned order that has been called "authentic phenomena" (Portmann) within the perceptible surfaces of the things that surround us.[18] The origins of these perceptually discoverable forms are unintelligible in the formalizations of a Galilean science and yet are significant for the interaction of life forms. Life shows itself in surface patterns that display an active posturing of life's identity, form, and innerness. Life forms have a centricity, an inwardness that cannot be reductively explained or anthropomorphically interpreted. Insofar as we are ourselves participating within the natural energies that impinge upon us, we are related to a morpho-genesis of nature that is not universal.

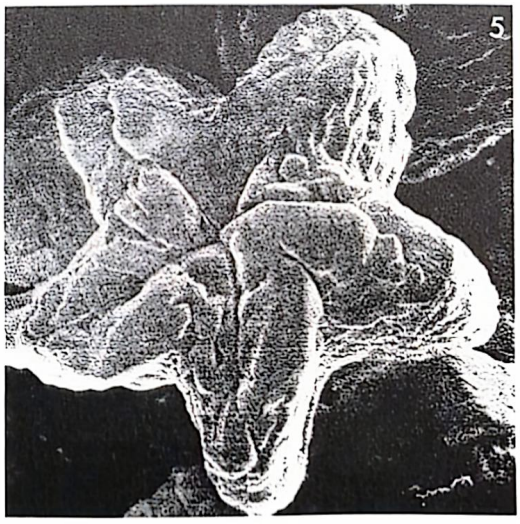
Hence, a morphogenetic epistemology is an alternative to the earth-alienation of a constructivistic mathematization of the sensual manifold. Its place in the contemporary system of knowledge is more important than the current division of knowledge would imply—for two reasons. First, as a Gaia hypothesis below claims, we may be living in the midst of an organic unit whose living operations must be recognized to avoid ecological destruction. Secondly, the current division of knowledge has created a "blind spot" in our knowledge which requires the rethinking of how modern science relates to socio-economic development on a global scale.[19] The second becomes even more crucial in the context of the presence of *Gaia*.

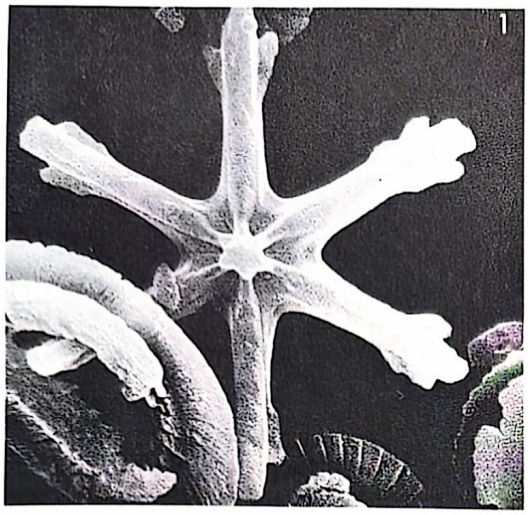
III

The Gaia hypothesis was formulated by a space scientist trying to define how to identify the presence of life on Mars or Venus. By modeling the earth's atmosphere along the principles of an analytical chemistry equilibrium, James Lovelock discovered significant differences in the atmospheric composition of the earth in comparison to Venus and Mars.[20] Computer simulations indicated that the final equilibrium, or steady state, atmosphere for earth would resemble that of Mars and Venus with approximately 98% carbon dioxide, about 2% nitrogen, and traces of oxygen. The actual earth's atmosphere composition is, however, maintained at a highly improbable composition of 0.03% carbon dioxide, 79% nitrogen, and 21% oxygen. Furthermore, this unlikely atmospheric composition seems to have been maintained for more than three billion years despite the fact that the sun's early intensity was 30% lower. From these and other improbable conditions (e.g., the constancy of the salinity of the oceans despite continuous salt input into the seas) that make life possible, Lovelock and others have proposed that the only possible explanation for these statistically impossible coincidences is to see the atmosphere as an organic construction: that is, as an











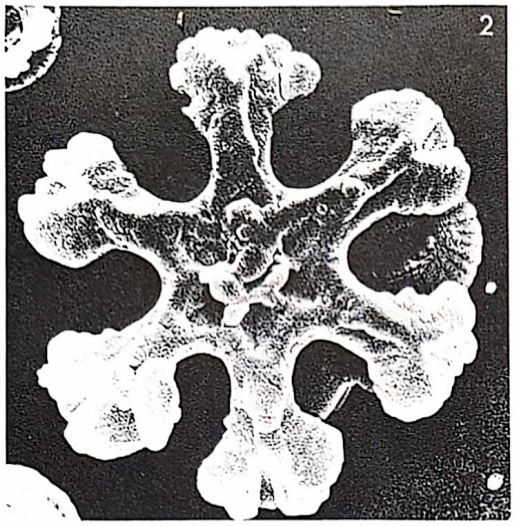


adaptation by the biosphere and oceans that secures the conditions necessary for life. Although all of the adaptive mechanisms that create the optimal global parameters necessary for life maintenance are not yet understood, many have been described. These are the reciprocally causal compensatory processes that return life parameters to acceptable levels.

For example, atmospheric oxygen levels, which are constantly increased by the products of photosynthesis, are kept in the 21% range by a self-regulating methane production cycle which absorbs oxygen within the atmosphere and releases it in the stratosphere. In the absence of methane production by bacterial fermentation of the anaerobic muds and sediments of the sea beds, marshes, and estuaries, the oxygen concentration of the atmosphere would rise as much as 1% every 12,000 years. (The probability of forest fires starting increases 70% for every 1% rise in oxygen concentration; at 25%, all vegetation on earth will burn.) Increases in atmospheric oxygen lead to overgrowth of aerobic micro-organisms which in death decay and increase the methane production potentials of the anaerobic microflora at the bottoms of seas, marshes, wetlands, etc. This organic self-regulating control of the amount of oxygen in the atmosphere is also tied into other complex signaling mechanisms that involve complementarities of nitrous oxide and methyl chloride (both of organic origin) with methane in the atmosphere, and constitute an organic cycle that extends throughout the global processes of biosphere and oceans. Reconstructing these patterns, the contemporary science of aeronomy increasingly documents the fact that without life's interference, oxygen *and* carbon dioxide levels could not be regulated. Thus, self-organizing global patterns reveal the self-reproducing goal-adaptations by *Gaia*—an identity that becomes more and more inescapable.

These invisible global patterns that make visible the constants essential for life are themselves modifications of the environment by the totality of life forms themselves. Only this hypothesis can account for the highly improbable homeostasis of the earth for over three billion years. While the Gaia hypothesis itself has not yet been scientifically established, its current plausibility provides several highly significant implications. First, if Gaia exists, then our actions in relation to the natural environment must become more informed about these self-regulating regulations (for example, modern increases in fossil fuel produced carbon dioxide and its "impact" on the Gaian regulation mechanisms). Secondly, the extent to which we currently do understand Gaian reproduction cycles, helps us suddenly to see that the vital "organs" of Gaia are the continental shelves and wetlands where planetary controls are centered in the ecology of aerobic micro-organisms and anaerobic microflora that are so important for atmospheric regulations. These eco-systems are of crucial importance for Gaia and their protection from human destruction therefore become a primary end for human survival.

The Gaia hypothesis challenges contemporary fears that pollution is the major problem of environmental destruction and that the dynamic of technology is its cause. Instead, what has to be understood are the morphogenetic symbiotisms within the global patterns of Gaia. *Where* we bring about socio-technical innovations may be more important than *what* we do. Given the global dynamic of an international economic system (see below), the ecological hazards of the modernization of global agriculture seem more dangerous than industrial pollutions (at this time). As world populations increase, the crisis potentials of agricultural modernization will also increase. Increasing human control over the earth's







biomass will force higher energy interventions in just those areas where global diversity and symbiotism are essential for optimizing conditions for terrestrial life. Specific agricultural projects—such as deforestation of the tropics and sea "farming" —may have global consequences unrecognized at present. Much more understanding of the "wisdom of Gaia" is needed for the human species to avoid altering some of the time cycles and in-built deviation-counteracting regulations of a global organism whose homeostasis is only now being recognized.

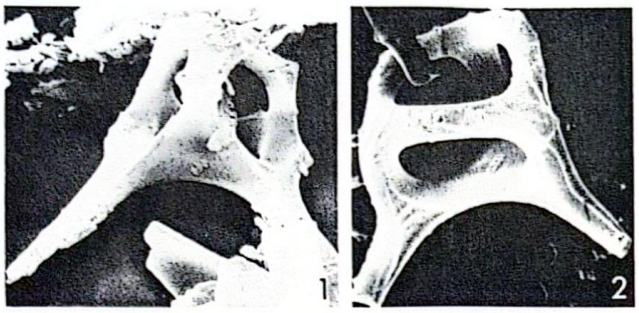
The Gaia hypothesis remains fruitful as long as the global patterns of goal-maintenance cannot be explained in terms of the laws of their components. No doubt the charge of "teleology" will appear.[21] But if we understand that "teleology" refers to something that stands outside of a process and yet directs it too, then homeostasis and morphogenetic processes are not teleological. The patterns of reciprocal causality are "teleonomic,"[22] in the sense of goal-directedness according to the operations of informational structures inherent in the forms of organization. Hence, no claim is made that a final end stands outside of the mechanisms of change and directs it by "causing" it to change—rather, emergence of stable non-equilibrium integrations are constitutive of organic organization (e.g., homeostasis of body temperature), eco-system succession through differentiation and non-equilibrium integrations.

How a "program" for goal-directedness is acquired is separate from the teleonomic manifestations of its operations. The fundamental question that emerges whether if the "program" —the informational structure—is an unplanned result of teleonomic operations of self-maintenance or an indication of a "program of purpose" in nature? The assumption of Gaian theorists, if I understand them, is that the homeostasis of Gaia can be understood only in the reconstruction of history of its formation on the one hand, and in increased global monitoring of the atmosphere, oceans, and natural environmental regulations (made possible by contemporary satellites and information technologies) on the other. The "program of purpose" inherent in Gaia is teleonomic operations and the program of homeostasis is an unplanned result defined only by the *limits* of the structure itself. In this sense, Gaian "purpose" is teleonomic in that the self-maintaining forms do not necessarily have a program of *self*-maintenance—stability and instability are both possible as perturbations of dissipative structures. Of course we do not know enough about the Gaia "program" —but the possibility that there is a morphogenetic logic to nature's development cannot be avoided. More complex patterns of heterogeneity, differentiation, and symbiotization may evolve and the human species may become more and more central to Gaian development.

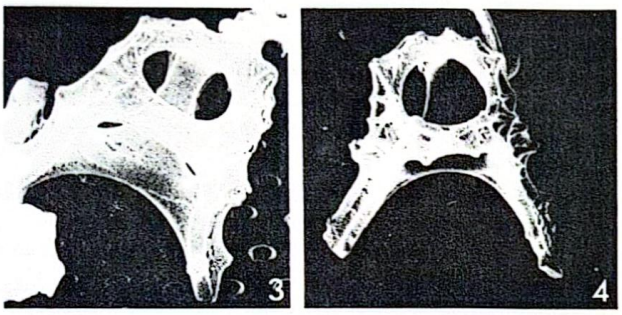
If the Gaia hypothesis is correct, the earth is not a "space ship" to be maintained by human planetary engineers. This technological metaphor continues the unconscious forms of technical control that must be transcended in order to participate co-operatively in Gaian ecology. "Nature" is not, as the modern myth of progress suggests, amenable to endless interventions that secure socio-economic development.

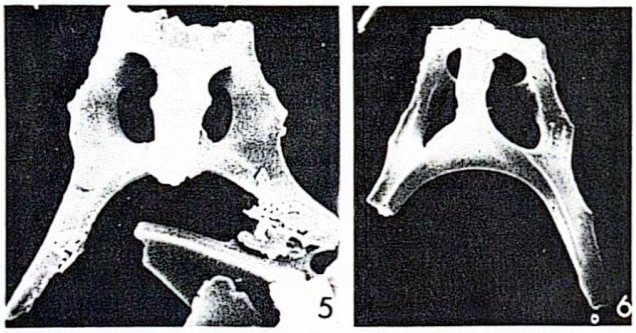
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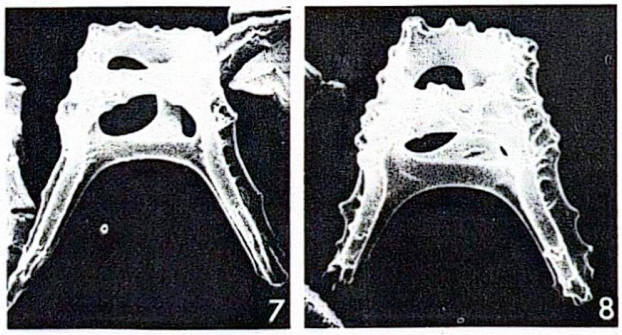
The logics of commodification and technical control force a shorter and shorter time frame upon socio-economic decisions. "Time is money": the scarce resource of investment cycles determine a global dynamic of environmental simplification which amplifies the technical interventions and domination of nature on a worldscale. International differences in

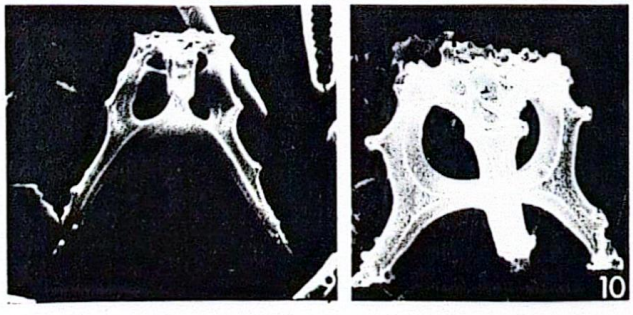


Eocene to Pliocene Archaeomonads, Ebridians, and Endoskeletal Dinoflaggellates.









"income" (read hierarchical power advantages) force a global dynamic of rapid economic development for all.[22] Low income countries are forced by rising food prices, especially in areas already subject to declining food production, to pursue desperation techniques that further degrade the land and create competition for scarce capital between the competing goals of agriculture, industry, and energy. The response now viewed as necessary is, for example, greater technical interventions into agricultural production where the present commodity values determine decision-making to the exclusion of ecological consequences. Hence, monocultural crop simplifications, loss of soil nutrients, and increases in pressures upon water resources, all compound to further force the less developed nations of the world to push for immediate increases in their incomes in order to continue the use of these high-energy technical interventions. These lead to deforestation, over-grazing, destructive cropping practice, desertification, and salination (water depletion through increased irrigation), and loss of genetic plant and animal resources as wild habitats are destroyed. The ultimate consequence of such "neutral" applications of science to ever more powerful interventions in agricultural production is an intensification of the income gap between the less and more developed countries and an even greater desperation that leads to worse ecological interventions to meet immediate needs.[24]

The logic of management and development imposed by an international economic system forces the immediate evaluation of all resources as present commodities. Economic rationality presumes that the commodification of the environment—as the costs of producing a resource and bringing it to markets—also makes ecological sense. This logic of commodification is also extended to pollution, where the polluter-pays principle supposedly will restrict levels of pollution.[25] But, the ecologically necessary components—such as genetic variety supplied by wild habitats—do not have any commodity value in present market evaluation. They are "external" to the costs of private production.

Despite growing awareness of environmental dangers, the dynamic of the international economic system has become ever more disruptive since the middle of the 1960's when the post-World War II economic boom ended. Since then, declining output, overcapacities, stagnating rates of investment in the developed core of an international economy, have led to a new entrepreneurial strategy based upon investments in the rationalization of the production process, both within core economies as well as in planned plant relocations in less developed countries. This new strategy for maintaining capital accumulation on a world scale simply utilizes the greater technical power that new forms of transportation and communications provide, while also sub-dividing the production process so that cheap labor can be used with little or no cost of either training or being responsible for the work force. New operational break downs of manufacturing processes permit the use of unskilled or semi-skilled workers over which the plants have more control and less costly responsibility.

The human costs of this new international division of labor is greater insecurity for labor forces throughout the international economy. Workers in core industrial-market societies experience more unemployment, plant closings and, in some cases, loss of their acquired professions too. The dynamic in less developed nations is tied into the uneven development pattern where the modernization of agriculture increases production at the cost of destroying traditional rural communities and subsistence forms of survival. Forced into migration

to urban-slum plant relocation centers, these newly "liberated" workers provide an inexhaustible source of the cheapest and most exploitable labor.

However, the plant relocations are part of the forces of under-development in that this industrialization is oriented only to production for export. Local purchasing power is too low to tie into this modernized sector and thus a dual economy is maintained. Dependency begins however when such countries attempt to provide the infrastructure needed for plant relocations (i.e., water, energy, roads, airports, etc.) because they hope they can realize benefits from it. But use of capital surplus generated from the modernized agricultural sector to try to finance industrial development puts additional strains upon rapid agricultural growth (with all the associated environmental problems mentioned above) while actually depleting and stagnating the rural social community and economy.

What Western economists are only now beginning to recognize is that development of natural resources is mainly an ecological problem that requires the recognition of bio-economic limits. This, of course, does not include the recent brands of economics that have emerged to renew late capitalist expansion (e.g., monetarists, "supply-side" economics). The problem with these new instruments of economic guidance is that they have no awareness of the bio-economic contexts of economic processes and seem to assume that the price mechanism can create matter and energy, prevent ecological crises, and stop social conflicts that derive from the inequal distribution of natural resources and the knowledge and tools needed to develop them.[26]

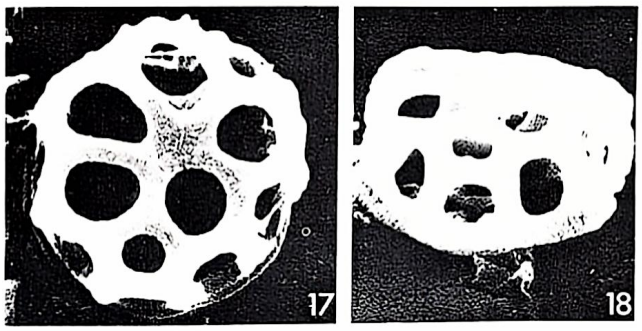
Not least of all in these cycles of economic and technical pressures upon the earth is the growing desperation of newly proletarianized workers everywhere. Increasing intensification of social conflict and wars has led to increased militarization and police violence. The *dis*-economies of this global economic rationalization expand with every new phase of "modernization" of the knowledge and tools used by "underdeveloped" peoples.

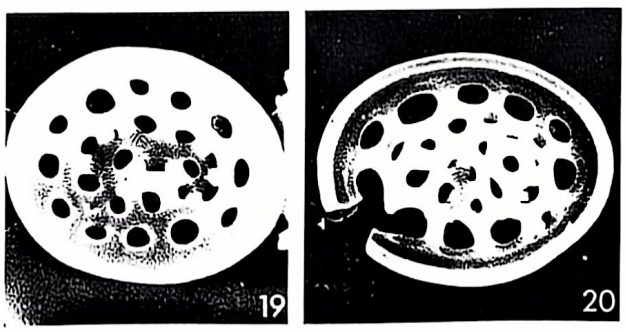
This global dynamic of enforced domination of nature and international divisions of labor is a story that can be told from the point of view of the expanding system's "stability"—or from the point of view of coercions upon the subsistence forms of human survival which it uproots (de-territorializes).[27] This global dynamic is created by the interests of the metropoles over the interests of villagers, peasants, rural communities, dependent unskilled workers, etc. on an international scale. Rather than assume that the developed world's techniques are essential for "human survival" (which means more than minimal biological needs, since it involves cultural beliefs about the good life), the encounters of developed-nondeveloped worlds can be narrated from the point of view of those who are not yet dislocated from subsistence forms. The relevance of this perspective is not to advocate a "no-growth" and "de-modernization" ideology but to begin from a situation where human survival demands an active participation in nature and thus where a new form of "development" can be experimentally innovated. These contexts have the sense of place (which mobile wage-laborers have usually lost) and collective identity that is essential for active resistance to new phases of modernization in the interest of outside structures. Advocacy research that can demonstrate where the hidden social costs of "socializing" production imply increasing the chances of de-territorialization (i.e., greater dependency) and irreversible environmental destruction, and de-colonialization movements can be indentified and supported. In these areas

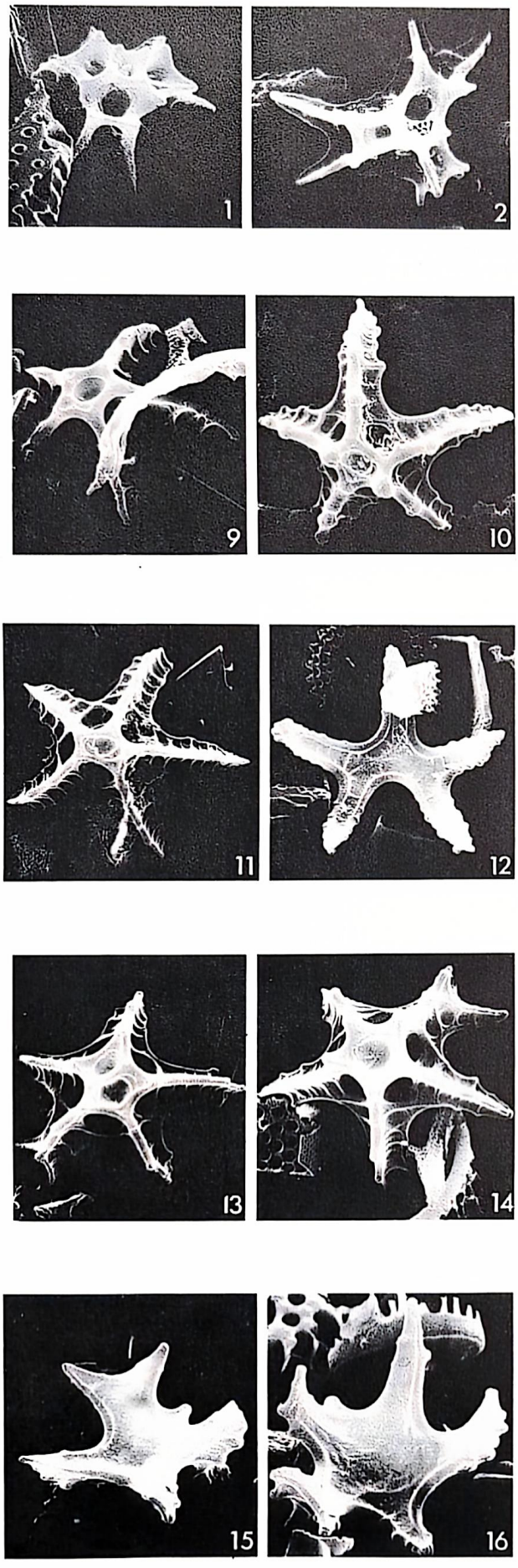












experimental models of eco-development can and are being created that discover multiple-use of local resources, identify sustainable yields that meet the needs of local peoples, while encouraging self-reliance and symbiosis between people and nature.[28] This means participation in the natural forces that make life possible in ways which are compatible with their permanent sustainability (e.g., renewal energy sources) both locally and globally. Participation in nature does not mean delusions of "self-sufficiency," or ascetic "voluntary simplicity," or reactionary ideologies of "survivalism," but active appropriation of technical knowledge of renewable energy, food production, health care, full use of indigenous co-operative forms as well as political networking with other groups. Collectively these efforts form an alternative of eco-development and "reinhabitation."[29]

Thus, a sphere of emancipation not generally recognized is latent in the "ecology movement's" rejection of the existing hierarchies of international and internal colonization of subsistence forms of production and socialization. A democratization of technical learning would unify at the level of everyday practice a problem-solving approach that is compatible with household and local survival and the eco-system's carrying capacity. This approach is already implied by efforts to create counter-movements in science (such as the "appropriate" technology movement) and can be recognized in the American population shifts of the 1970's which signaled a significant return to rural living. What is less visible is the growth of subsistence exchange networks (the "underground barter economy") which increases the flexibility and availability of resources to the many categories of subsistence life-styles.

To realize, as Ivan Illich's insights document, that the unrecognized pre-condition for the possibility of wage-labor is "shadow-work"—or the enforced forms of labor that complement wage-labor such as "house-work," the forced consumption of schooling, accreditation, or other activities required for "job-holding." These forms of unpaid servitude emerged simultaneously with the enclosures of commercial capitalism which had created a major conflict of domestic and "public" spheres of existence. The result was a new economic interest in the sex-coupling of female shadow-workers and male wage-workers that replaced more equitable forms of subsistence work for both sexes.[30]

Illich's thesis is that the bifurcation of work in the modern era into wage-labor and shadow-work, which has been unnoticed by Marxists and Liberals, constitutes an intensification of modern society's "war against subsistence." Marx's notion of international capitalism forming an irreversible context of world-history receives a significant contextualization by Illich's naming of the form of domination that falls through the Marxist categories. Marx effectively accepts Ricardo's theory of the comparative advantage of an international specialization of production, and in doing so, affirms the civilizing impact of capital despite the exploitation of poor nations by the national economics of the "developed" world. That unequal economic exchange creates dependencies internationally (and within national economies) indicates that the actual advantages of the higher productivity of capitalist production and wage-labor must now be balanced by systematic analysis of the real increase in use-values given the hidden costs of shadow-work and ecological destruction. The costs of shadow-work can be recognized as a major burden placed upon the majorities within the "developed world" too—in the form of endless schooling for job-holding and long periods of private accumulation for a capital-intensive household.

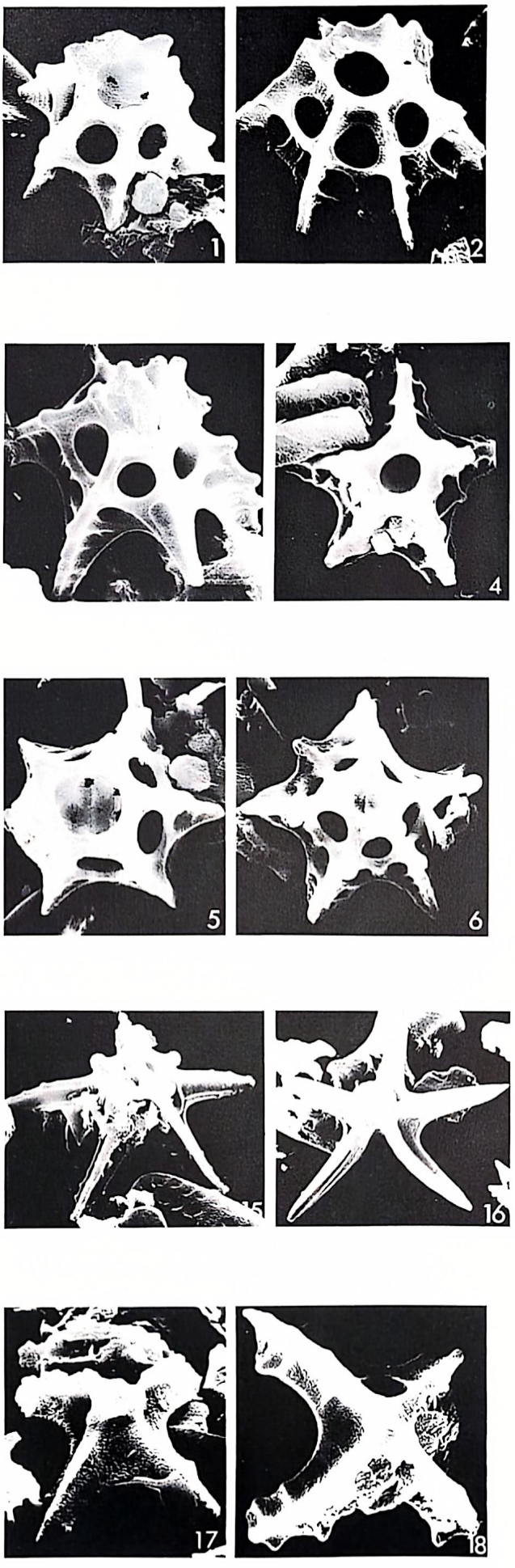
In so far as this can be documented, it will show that the real dominations of modernity are the destructions of subsistence activity and the enforced dependencies of wage-labor and consumer lifestyles.

Subsistence activity begins with a self-reliance and self-determination in the meeting of human needs that is also aware of the co-evolutionary need for nature's patterns to "subsist" too. Adoption of subsistence strategies of adaptation to the environment maximize social flexibility and ecological diversity, while also eluding the endless desire for new commodities that seems to be the motivational glue of modern commodity-intensive worlds. What has been called the "counter-cultures" by both apologists and critics fails to grasp their unique basis in subsistence production of use-values. While sociological essayists condemn these practices as communal ideologies that seek "pseudo-gemeinschaft" or are "parasites" on the prevailing social systems, they fail to reflect upon the split between wage-labor and shadow-work that their own academic careers presuppose.

Eco-development and re-inhabitation movements are the theory and practice that could make a difference for parts of the "third world" and for enclaves of the fourth world. Within modern political states, the very same movements are often viewed as "de-centralization strategies." But the more effective language is no longer socio-political but ecological concepts of bioregions, watersheds, and eco-systems. These units represent real "unmovable capital" which can be defended against the forces that would commodify them as "natural resources" and abandon them to centralized management decision-making processes. The point of indigenous, or re-inhabitation settlement, is to claim the rights of inhabited place against corporate natural resource planning as justifiable resistance to colonially occupied territories. Here is where "mediating structures" are really needed that would provide state resources for local employment to define multiple use and sustained yield potentials of a bioregion as well as to provide access to legal due process. Because "property rights" are basically the norms of use agreed upon by law, the strategy of eco-development will require systematic transformation of the norms of property use as part of the rights to liberty of citizens. An ecologically rational society cannot emerge without a politically concrete understanding of the need for extending the normative regulations that protect the democratization of social practice. Here is another area where a counter-movement in the (social) sciences is a necessary precondition for a realizable alternative future.

Critical social scientists beginning from the existing practice of, say, the feminist or ecology movements, may make it more possible to radicalize and guide experimental practice by constructing models of democratization that anticipate more universal and reflexive forms of learning. The existing strategies for "self-management" of productive organizations could be recast in terms of the "communicative rationalization"[31] of decision-making processes, and how these may be more discursively open to participation. Societally the notion of communicative democratization is also helpful for the modeling of more open policy formation processes in which a discursively formed debate could challenge the technocratic suppression of publics. Immanent critiques of societal processes of compromise and consensus formation could radicalize existing political struggles for democratization in America such as:

(a) the forming of parallel structures that can provide advocacy services for depoliticized policy spheres;



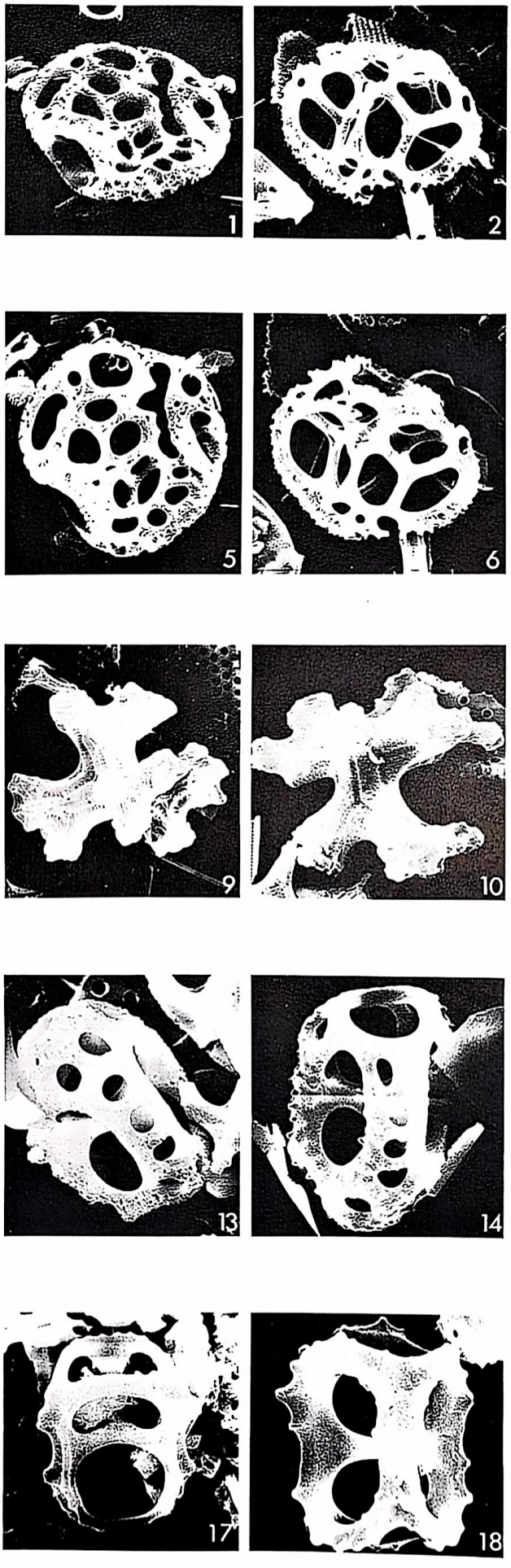
(b) the forming of resource networks that can act collectively on local or wider issues;
(c) the use of advocacy and network forms to support the creation of voluntary associations of all kinds that can empower people to solve their own problems.

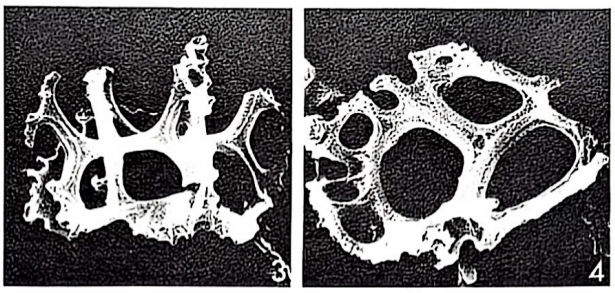
In these cases, analysis of the blocks to democratization can be measured against the openness of consensus achieved without force. A social ecological limit to the democratic forming of the goals of society rests upon the legitimacy of the *non-coerced* processes by which they are formed.

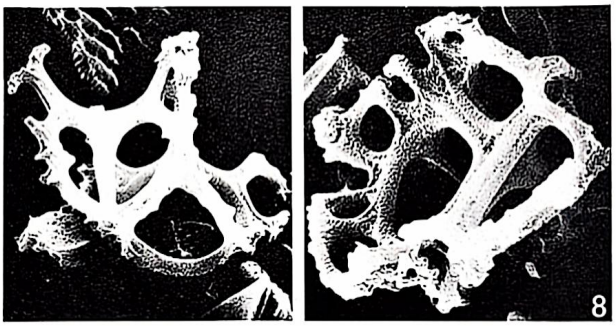
An overall consequence of this communicative notion of democratization is to resolve the 19th century antinomy of socialist and anarchist principles of the political versus the social revolutions. It makes possible a reconciliation of a de-centralizing practice that increases local and/or regional autonomy—while also providing a notion of rational consensus formation which can be extended by the operations of both scientific communities and socio-political processes. The rationalization of communicative learning, like anarcho-communist libertarianism, sees the dissolution of social force that prevents the conscious resolution of conflicts as the "mechanism" for the creation of more appropriate forms of freedom. What has been missing in anarchist libertarianism is the capacity to move beyond the heroism of the deed and anticipate more universalizable forms of democratization. Conversely, what has been missing in orthodox Marxist "productivism" is a criterion for emancipation that goes beyond the self-validating ideology of "socialist authority." While anarchists effectively view all past forms of "justice" as corrupted and destroyed and only the present authenticity of affinity-groups as consistent with libertarian futures, they fail in their conception of how these "islands of liberation" relate to wider social and political processes.[32]

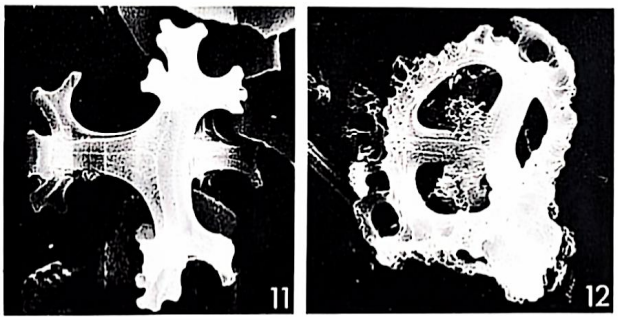
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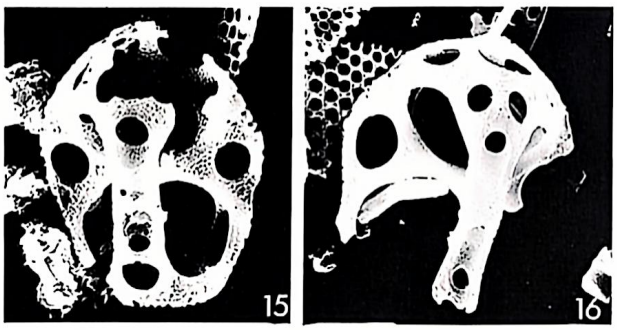
The dynamic of global development and the counter-potential of eco-development and re-inhabitation defines a conflict potential central to the current international economic development as well as internal to core nation-states. For example in the United States the energy crisis era has resulted in regions that have been designated "zones of national sacrifice" (by the National Academy of Science). In these areas, such as Appalachia and the American Indian reservations, from Mexico to South Dakota, designation of such zones justifies energy corporation colonization as a national necessity. The extensive domination exercised by corporations over the life chances of mountaineers and Indians has been hidden behind the claims that these areas are the major coal and uranium resources of the country. In both cases, the images of "backward cultures" and the need to integrate the regions into the national economy are used to justify a colonial practice that basically leaves the area's people more dependent and their land irreversibly damaged. In both areas, resistance to ecological destruction and re-affirmation of ethnic identity create movements for protection of rural and/or tribal culture. These areas (and others such as parts of the northwest) are the internal third worlds of the United States and represent critical bioregions where central economic policy directly contradicts the needs of human survival. Here, as in other colonialized parts of the world, the possibility of *human* survival (and eco-system sustainability) does not depend upon administrative and economic rationalizations, but upon the democratization of knowledge and tools on the one hand and the activation of rehabitation and de-colonization movements on the other.

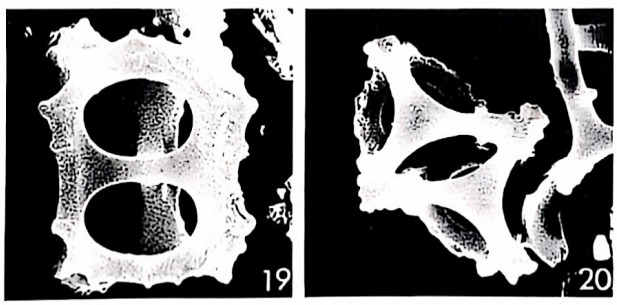












The scope of a truly universalizable emancipatory practice requires a systematic recognition of the ecologically sustainable forms of production and appropriation of traditions. Both economic liberalism and Marxist socialism remain hopelessly rooted in 19th century assumptions of nature as an infinite reservoir of resources and infinitely manipulable as the progress of technical knowledge provides more and more power over nature. These ideologies are equally blind to ecology, subsistence forms, and the possibilities of the critical re-appropriation of tradition. In the United States there are potentialities for activating indigenous traditions that have a libertarian cultural surplus for justifying the empowering of people, the identification with place, and local and ethnic identity.

This raises the issue of "cultural nationalism" which the left sees as identifications with particularistic identities that are potentially "reactionary." In this light, the recent statement by the Sioux Indian spokesman Russell Means at the 1980 Black Hills Survival Gathering voices a response to this logic:

> Revolutionary Marxism is committed to even further perpetuation and perfection of the very industrial process which destroys us all. It offers only to "redistribute" the results—the money, maybe...
>
> So, in order for us to really join forces with Marxism, we American Indians would have to accept the national sacrifice of our homeland; we would have to commit cultural suicide...
>
> ...I hear revolutionary Marxists saying that the destruction of the environment, pollution, and radiation will all be controlled... Do they know how these things will be controlled? No, they simply have faith science will find a way.... Science has become the new European religion for both capitalists and Marxists; they are truly inseparable...
>
> All European tradition... has conspired to defy the natural order of things. Mother Earth has been abused,...and this cannot go on forever...Mother Earth will retaliate, the whole environment will retaliate, and the abusers will be eliminated. Things come full circle... *That's* revolution. And that's a prophecy of my people, of the Hopi people...American Indians have been trying to explain this to Europeans for centuries.[33]

Other voices from internally colonialized sectors of this country speak the same vision, albeit in different traditional symbols:

> A healthy culture is a communal order of memory, insight, value, work, conviviality, reverence, aspiration. It reveals the human necessities and the human limits. It clarifies our inescapable bonds to the earth and to each other....A culture cannot survive long at the expense of either its agricultural or its natural sources.... The word "agriculture," after all, does not mean "agriscience," much less "agribusiness." It means "cultivation of land." And "cultivation" is at the root of the sense both of "culture" and "cult." The ideas of tillage and worship are thus joined in culture. And these words come from an Indo-European root meaning both "to revolve" and "to dwell." To live, to survive on the earth, to care for the soil and to worship, are all bound at the root to the idea of a cycle....If we corrupt agriculture we corrupt culture, for in nature and within certain invariable social necessities, we are one body...[34]

It is my contention that the Sioux spokesman and the poet from Kentucky both speak for the same American future and presuppose the same notion of time's order in nature. In that way they are both involved in the cultivation of an ecologically rational society, which a little reflection on time's order in nature implies.



FOOTNOTES

[1]In *The Phenomenon of Life: Toward a Philosophical Biology* (N.Y., Harper, 1966), Hans Jonas has argued that we moderns live under the perspective of pan-mechanism in which the very existence of life has become the inexplicable phenomenon. The worlds of archaic humanity had the opposite problem. Living within world-views of pananimism (or vitalism), the inexplicable problem—in the sense of existential paradox—was death. In this sense pre-modern societies culturally constituted death as part of human existence. In modern cultures we have viewed organic life under the same cognitive forms that we used to understand inorganic matter-energy relations in space and time.

[2]Hence human existence is predicated on this fear and terror of nature. See Arnold Gehlen, *Man in the Age of Technology* (N.Y., Columbia University Press, 1980). Gehlen's interpretation of the history of socio-technical development has influenced both conservative [See Peter Berger, *et. al., The Homeless Mind* (N.Y., Vintage, 1973) and critical social theory (see Jurgen Habermas' "Science and Technology as Ideology" in *Toward a Rational Society* (Boston, Beacon, 1970)]. In Habermas' essay, Gehlen's history of technology is used to reject Herbert Marcuse's claim that the universality of one-dimensionality requres the development of a "new science and technology." This claim is dependent upon an evolutionary perspective that sees cognitive development as a progressively more universal and invariant instrumental relation to natural "objects." This presupposes that the mathematization of the human sensual manifold, as in Kant's notion of natural knowledge, is the only form of possible knowledge of nature and is adequate to its "object."

[3]Ludwig Edelstein, *The Idea of Progress in Classical Antiquity* (Baltimore, The Johns Hopkins Press, 1967).

[4]David Bohn, *Wholeness and the Implicate Order* (Boston, Routledge & Kegan Paul, 1980), p. 11.

[5]See deSantillana and von Deschend *Hamlet's Mill: An Essay on Myth and the Frame of Time* (Boston, Gambit, 1969) for an account of how the flow of time and time of music formed the archaic world's experience of nature as ordered by the order of time.

[6]See Gregory Bateson, *Steps to an Ecology of Mind* (N.Y., Ballantine, 1972), p. 252.

[7]Critique of modern science's fallacy of "simple location," or the instrumentalist spatialization of events, has been central to A.N. Whitehead's philosophy of organicism. Whitehead argues that the basic physical unities are "concrescent actualities" and resemble a living organism in that they depend not on its components but on the *pattern* through which they are composed. See *Science and Modern World* (N.Y., Free Press, 1925).

[8]Hannah Arendt, *The Human Condition* (Garden City, N.Y., Doubleday, 1958). Hannah Arendt's claim that all European languages discriminate between "labor" and "work" indicates a dimension of the bio-social world that is totally ignored in social theory. While all modern social theories of progress project "work" as the form-giving fire and nature as the object and resource for human production, the endless recurrent necessities of sustaining biological life is lost in the modern image of "process" (of nature and economic production). We labor with our bodies and work with our hands; this fundamental difference is documented by the universal existence of songs of labor that accompany the rhythmically ordered co-ordination of the body. (Songs of work are social and sung after work.) In the midst of labor, tools lose their instrumentality and function as means to an end; the certainty of the motion predominates. Labor constitutes the mediating inter-face of human world and nature and reflections on meaning of this linkage for sustainable form of human survival is essential.

[9]Hannah Arendt, *The Human Condition, op. cit.*, p. 238ff.

[10]Ilya Prigogine, "Unity of Physical Laws and Levels of Description" in M. Grene (editor) *Interpretations of Life and Mind* (N.Y., Humanities Press, 1971) and Ilya Prigogine and others "Thermodynamics of Evolution" in (*Physics Today* Vol. 25 #1, 1972.

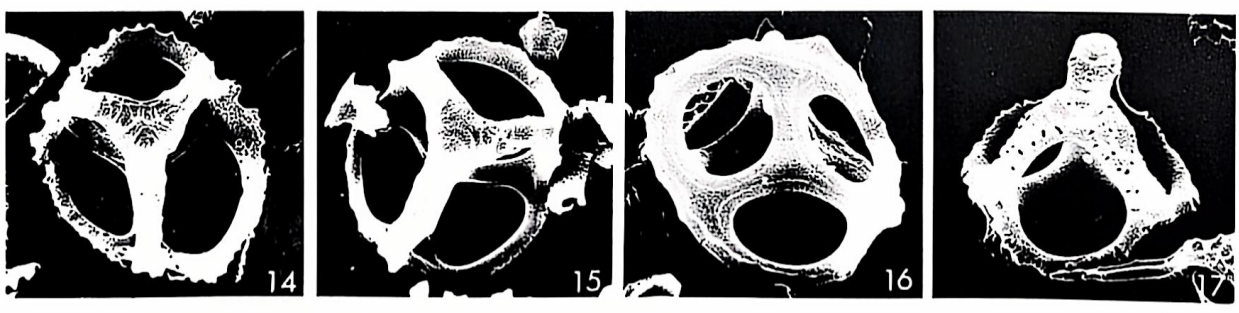
[12]See John and Nancy Jack Todd, *Tomorrow Is Our Permanent Address* (N.Y., Harper & Row, 1980), p. 48.

[11]See Magoron Maruyama, "The Cybernetics: Deviation-Amplifying Mutual Causal Processes" in *American Scientist* #51, 1963, and G. Nicolis and I. Prigogine, *Self-Organization in Non-Equilibrium Systems* (N.Y., Wiley Interscience, 1977).

[13]Lancelot L. Whyte, "Towards a Science of Form" in *Hudson Review* Vol. 23 #4, Winter 1970-71, reminds us of the sense in which the natural world is a perceptually present world of spatial units from molecules, crystals, organisms to solar systems and spiral nebulae. How these spatial forms are generated—how these units and hierarchies of units arise in nature—is the project of a morphic science.

[14]H.H. Pattee, "Complementarity vs. Reduction as Explanation of Biological Complexity" in *American Journal of Physiology* Vol. 236 #5, May 1979 where he argues:

> As a consequence of this property of information none of the rules or constraints of information-processing systems can be reduced to rate-dependent equations (to the structural laws of nature T.S.), and therefore their descriptions cannot be integrated in time, as are rate equations, to give the trajectory or behavior of the system. Such informational constraints that have rate-independent alternative structures are called nonintegrable... constraints. I would define biological function as activity that is controlled or measured by nonintegrable constraints. (p. R244).




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Both the explanatory laws of physics and the cybernetics of nonintegrable constraints are essential for an account of biological organization.

[15]Bateson, *op. cit.*, p. 460.

[16]Ilya Prigogine, *From Being to Becoming: Time and Complexity in the Physical Sciences* (San Francisco, W.H. Freeman & Co., 1980).

[17]G. Nicolis and I. Prigogine, *Self-Organization in Nonequilibrium Systems: From Dissipative Structures to Order Through Fluctuations* (N.Y., John Wiley & Sons, 1977).

[18]See Marjorie Grene's *Approaches to a Philosophical Biology* (N.Y., Basic Books, 1965) for a discussion of Portmann's thinking in contrast to other biological theorists who reject the Galileian primary qualities as fundamental for organic life. For a brief introduction to Portmann in English, see "Beyond Darwinism" in *Commentary* XL (1965), p. 31-41.

[19]This argument is developed below in Section IV.

[20]J.E. Lovelock, *Gaia: A New Look at Life on Earth* (N.Y., Oxford University Press, 1980)

[21]As indeed it has: See W. Ford Doolittle's review of Lovelock's book in *Co-Evolution Quarterly #29*, Spring 1981, p. 58ff. where the charge that the feedback loops of Gaia are either created by natural selection or, more likely to Doolittle, occur by chance. In response, we can return to Prigogine's theory of dissipative strūctures:

> We here propose an alternative description of prebiotic evolution. The main idea is the possibility that a prebiological system may evolve through a whole succession of transitions leading to a hierarchy of more and more complex and organized states... As a result, if the system is to be able to evolve through successive instabilities, a mechanism must be developed whereby each new transition favors further evolution by increasing the nonlinearity and the distance from equilibrium. One obvious mechanism is that each transition enables the system to increase the entropy production... in "Thermodynamics of Evolution." *op. cit.*

However other reviewers of the book find the hypothesis tenable: See K. Mellanby, *New Scientist,* Oct 4, 1979; René Dubos, *Nature,* Nov. 8, 1979; P. Morrison, *Scientific American,* March 1980.

[22]Erns Mayr, "Teleological and Teleonomic: A New Analysis" in *Boston Studies in the Philosophy of Science* 14 (1974), p. 91-117.

[23]See F.M. Lappe and J. Collins, *Food First: The Myth of Scarcity* (Ballantine Press, 1978). Also see *The New International Division of Labor* by F. Frobel, J. Heinrichs, D. Kreye (Cambridge University Press, 1980).

[24]See Gerald O. Barney, *The Global 2000 Report to the President of the U.S.: Vol. 1 The Summary Report* (N.Y., Pergamon Press, 1980).

[25]See Klaus Myer-Abich, *op. cit.*

[26]See Nicholas Georgesev-Roegen, "Inequality, Limits and Growth from a Bio-Economic Viewpoint" in *Review of Social Economy* V. 35, Dec. 1977.

[27]See Serge Moscovici, "The Re-Enchantment of the World" in Norman Birnbaum, *Beyond the Crisis* (N.Y., Oxford University Press, 1977) for an analysis to which this paper is indebted.

[28]Raymond Dasmann, "Eco-Development" in the *Planet Drum Review* Vol. 1 #2, Winter 1981).

[29]The term "re-inhabitation" is taken from one of many local journals which are now advocating the watershed as the natural eco-development unit. The strategy is the use of a combination of oral history and local ecological research as a place identification approach. See Paul Ryan's *Talking Wood: Living in the Passaic Watershed,* 1980 (Talking Wood, P.O. Box 364, Pompton Lakes, N.J. 07442). (But the original use of the term was by Peter Berg in an article on "Re-Inhabitation of California" in *The Ecologist* in the early 1970's.)

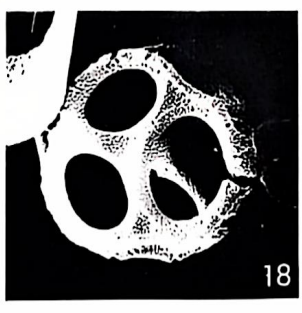
[30]See Ivan Illich, *Shadow Work* (Boston, Marion Boyers, 1981).

[31]For the notion of communicative rationalization, see Jurgen Habermas' "Science and Technology as Ideology" in *Toward a Rational Society* (Boston, Beacon, 1970). However, this paper represents a critique of Habermas' instrumental concept of natural science as well as his orientation toward core nation-states of the West. For an account of his notion of critical theory, see my *The Critique of Domination* (Boston, Beacon, 1974).

[32]Yet there is a sense in which the anarchist position's notion that theory and practice is ultimately unified at the level of *action which changes reality* cannot be faulted. Especially in the American context, there is an affinity of anarcho-libertarianism and the historical symbols of independence, self-determination, and self-reliance which are, at least in origin, not reducible to possessive individualist idealizations of self-interested production for gain. These American practices were socially and ethically mediated by the ever-present American quest for "community." An anarchist practice still permeates the American movements for de-centralization, ecology and appropriate technology, feminism, etc. There is also a unique amalgam of Old World utopian surplus and contempoary anarchist, neo-primitivist, and nativist symbols that simply mystifies Marxists—especially theoreticians who expect social relations to dance according to their notion of reason.

[33]Russell Means, "For the World to Live, 'Europe' Must Die" in *Mother Jones,* Dec. 1980.

[34]Wendell Berry, *The Unsettling of America: Culture and Agriculture* (San Francisco, Sierra Club Books, 1977).


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THE IMPLOSION OF MEANING IN THE MEDIA

Jean Baudrillard

Translated by John Johnston

We are in a universe where there is more and more information, and less and less meaning. Consider three hypotheses:

—either information produces meaning (a negentropic factor), but doesn't succeed in compensation for the brutal loss of signification in every domain. The reinjection of message and content by means of the media is vain, since meaning is devoured and lost more rapidly than it is reinjected. In this case, appeal has to be made to a productivity at the base in order to relieve the failing media. This is the whole ideology of free speech, of the media subdivided into innumerable individual cells of transmission, indeed "anti-media" (CB radios, etc.).

—or information has nothing to do with signification. It is something else, an operational model of another order, outside of meaning and the circulation of meaning properly speaking. This is the hypothesis of Shannon: a sphere of information that is purely instrumental, a technical medium implying no end purpose of meaning, and thus which must not itself be implicated in a value judgment. A kind of code, perhaps like the genetic code: it is what it is, it functions as it does; meaning is something else, coming afterwards in some way, as in Jacques Monod's *Chance and Necessity*. In this case, there would simply be no significant relation between the inflation of information and the deflation of meaning.—or rather the contrary: there is a rigorous and necessary correlation between the two, to the extent that information is directly destructive of meaning and signification, or neutralizes it. The loss of meaning is directly linked to the dissolving and dissuasive action of information, the media, and the mass media.

The third hypothesis is the most interesting, although it goes against the grain of all accepted opinion. Everywhere socialization is measured according to exposure through media messages. Those who are under-exposed to the media are virtually asocial or desocialized. Everywhere information is reputed to produce an accelerated circulation of meaning, a plus-value of meaning homologous to the economic plus value which results from the accelerated rotation of capital. Information is given as creative of communication, and even if the wastage is enormous a general consensus would have it that there is in the total nonetheless a surplus of meaning, which is redistributed in all the interstices of the social fabric—just as a consensus would have it that material production, despite its dysfunctions and irrationalities, nevertheless leads to an excess of wealth and social finality. We are all accomplices in this myth. It is the alpha and omega of our modernity, without which the credibility of our social organization would collapse. Yet *the fact is that it is collapsing*, and for this very reason. Just where we think that information is producing meaning, it is doing the exact opposite.

Information devours its own contents; it devours communication and the social *(le social)*, and for two reason:

1. Instead of causing communication, *it exhausts itself in the act* of staging the communication; instead of producing meaning, it exhausts itself in the staging of meaning. It is a gigantic process of simulation with which we are very familiar. The non-directed interview, speech, listeners who telephone in, participation at all levels, blackmail through speech—all say: "It's your concern, you are the event, etc." More and more information is invaded by this sort of phantom content, this homeopathic graft, this awakened dream of communication. It is a circular set-up in which the desire of the audience is put on stage, an anti-theater of communication, which, as we know, is never anything but the recycling "in the negative" of traditional institutions, the integrated circuit of the negative. Immense energies are deployed in order to keep this simulacre standing upright, and to avoid the brutal de-simulation which would confront us with the obvious reality of a radical loss of meaning.

It is useless to wonder if it is the loss of communication that causes this escalation in the simulacre, or if it is the simulacre that is there first, with this dissuasive finality, since it short-circuits in advance all possibility of communication (precession of the model which puts an end to the real). It is useless to wonder which is the first term. There is none, it is a circular process—that of simulation, that of the hyperreal: a hyperreality of communication and of meaning, more real than the real. Hence the real is abolished.

Thus communication as well as *the social* function as a closed circuit, as a lure—to which is attached the force of a myth. The belief and the faith in information attached to this tautological proof give the system itself, by doubling its signs, an unlocatable reality.

But this belief may be thought to be as ambiguous as the one attached to myths in archaic societies. One both believes and doesn't believe. The question is simply not posed. "I know very well, but all the same..." A sort of inverted simulation corresponds in the masses, in each one of us, to this simulation of meaning and of communication in which this system encloses us. To the tautology of the system the masses have responded with ambivalence; to dissuasion they have



This "The" is formed by machining a large number of discrete "holes" in a thin coating of bismuth metal. Each hole is made by a single laser pulse. Such graphic information may be transmitted over telephone or high capacity digital channels. (Bell Labs).

responded with disaffection, and an always enigmatic belief. The myth exists, but one must guard against thinking that people believe in it. That is the trap of critical thought, which can only be exercized given the naiveté and the stupidity of the masses as a presupposition.

2. Behind this exacerbated staging of communication, the mass media, with its pressure of information, carries out an irresistable destructuration of the social.

Thus information dissolves meaning and dissolves the social into a sort of nebulous state leading not at all to a surfeit of innovation but to the very contrary, to total entropy.[1]

Thus the media do not bring about socialization, but just the opposite: the implosion of the social in the masses. And this is only the macroscopic extension of the *implosion of meaning* at the microscopic level of the sign. The latter is to be analyzed starting from McLuhan's formula *the medium is the message,* the consequences of which are far from being exhausted.

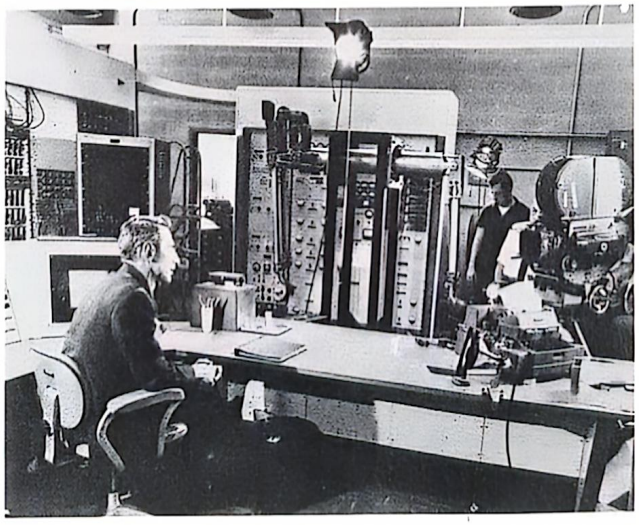
Its meaning is that all the contents of meaning are absorbed in the medium's dominant form. The medium alone makes the event—and does this whatever the contents, whether conformist or subversive. A serious problem for all counter-information, pirate radios, anti-media, etc. But there is something even more serious, which McLuhan himself did not make clear. For beyond this neutralization of all content, one could still hope to manipulate the medium in its form, and to transform the real by utilizing the impact of the medium as form. With all content nullified, perhaps there is still a revolutionary subversive use-value of the *medium as such*. Yet—and this is where McLuhan's formula at its extreme limit leads—there is not only the implosion of the medium itself in the real, *the implosion of the medium and the real* in a sort of nebulous hyperreality where even the definition and the distinct action of the medium are no longer distinguishable.

Even the "traditional status" of the media themselves, characteristic of our modernity, is put into question. McLuhan's formula, *the medium is the message,* which is the key formula of the era of simulation, (the medium is the message—the sender is the receiver—the circularity of all poles—the end of panoptic and perspectival space—such is the alpha and omega of *our* modernity), this very formula must be envisaged at its limit, where, after all contents and messages have been volatilized in the medium, it is the medium itself which is volatilized as such. At bottom, it is still the message which lends credibility to the medium, and which gives to the medium its distinct and determined status as intermediary of communication. Without a message, the medium also falls into that indefinite state characteristic of all our great systems of judgement and value. A single *model* whose efficacy is *immediacy,* simultaneously generates the message, the medium, and the "real".

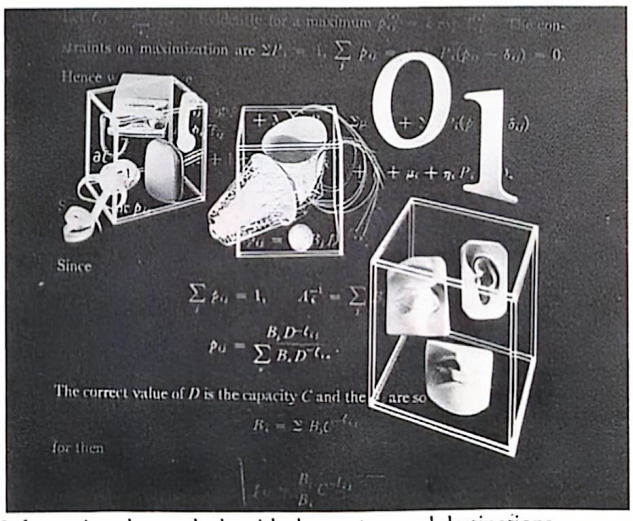
In short, *the medium is the message* signifies not only the end of the message, but also the end of the medium. There are no longer media in the literal sense of the term (I am talking above all about the electronic mass media)—that is to say, a power mediating between one reality and another, between one state of the real and another—neither in content nor in form. Strictly speaking, this is what implosion signifies: the absorption of one pole into another, the short-circuit between poles of every differential system of meaning, the effacement of terms and of distinct oppositions, and thus that of the medium and the real. Hence the impossibility of any mediation, of any dialectical intervention between the two or from one to the other, and the circularity of all media effects. Hence the impossibility of a sense (meaning), in the literal sense of a unilateral vector leading from one pole to another. This critical—but original—situation must be thought through to the very end; it is the only one we are left with. To dream of a revolution through content or through form is useless since the medium and the real are now in a single nebulous state whose truth is undecipherable.

The fact of this implosion of contents, absorption of meaning, evanescence of the medium itself, re-absorption of the whole dialectic of communication in a total circularity of the model, and implosion of the social in the masses, can appear catastrophic and hopeless. But it is only so in regard to the idealism that dominates our whole vision of information. We all live by a fanatical idealism of meaning and communication, by an idealism of communication through meaning, and, in this perspective, it is very much *a catastrophe of meaning* which lies in wait for us.

But it must be seen that the term "catastrophe" has this "catastrophic" meaning of the end and annihilation only in a linear vision of accumulation and productive finality which the system imposes on us. Etymologically, the term only signifies the curvature, the winding down to the bottom of a cycle leading to what can be called the "horizon of the event," to the horizon of meaning, beyond which we cannot go. Beyond it, nothing takes place *that has meaning for us*—but it suffices to exceed this ultimatum of meaning in order that



Claude E. Shannon during a telecast on CBS of The Thinking Machine, Oct. 1960. (Bell Labs).



Information theory deals with the sources and destinations, transmitters and receivers, and channels, of communication. Of particular importance is the concept of the binary digit, or bit ("0" or "1" for example as the fundamental unit of information). (Bell Labs).

catastrophe itself no longer appear as the last, nihilistic day of reckoning, such as it functions in our current collective fantasy.

Beyond meaning, there is fascination, which results from the neututralization and implosion of meaning. Beyond the horizon of the social, there are the masses, which result from the neutralization and implosion of the social.

The essential thing today is to evaluate this double challenge—the defiance of meaning by the masses and their silence (which is not at all a passive resistance)—and the defiance of meaning which comes from the media and its fascination. In regard to this challenge all the marginal and alternative attempts to resuscitate meaning are secondary.

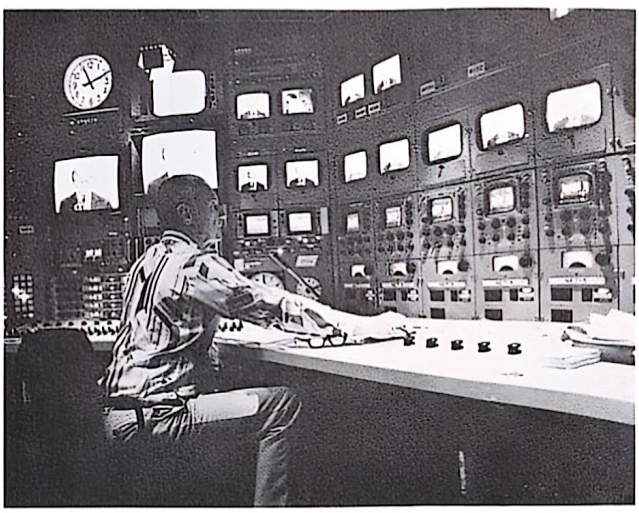
Evidently there is a paradox in this inextricable conjunction of the masses and the media: is it the media that neutralizes meaning and that produces the "unformed" (or informed) mass, or is it the mass that victoriously resists the media by diverting or absorbing all the messages which it produces without responding to them? Some time ago, in "Requiem for the Media," I analyzed (and condemned) the media as the institution of an irreversible model of communication *without response*. But today? This absence of response can be understood as a counter-strategy of the masses themselves in their encounter with power, and no longer at all as a strategy of power. What then?

Are the mass media on the side of power in the manipulation of the masses, or are they on the side of the masses in the liquidation of meaning, in the violence done to meaning and in the fascination that results? Is it the media which induce fascination in the masses, or is it the masses which divert the media into spectacle? Mogadiscio-Stammheim:[2] the media are made the vehicle of the moral condemnation of terrorism and of the exploitation of fear for political ends, but, simultaneously, in the most total ambiguity, they propagate the brutal fascination of the terrorist act. They are themselves terrorists, to the extent to which they work through fascination (cf. Umberto Eco on this eternal moral dilemma: how not to speak of terrorism, how to find a *good use* for the media? *There is none)*. The media carry meaning and non-sense, and manipulate in every sense simultaneously. The process cannot be controlled, for the media convey the simulation internal to the system and the simulation destructive of the system according to a logic that is absolutely Moebian and circular. And this is exactly what it is like. There is no alternative to it, no logical resolution. Only a logical *exacerbation* and a castastrophic resolution.

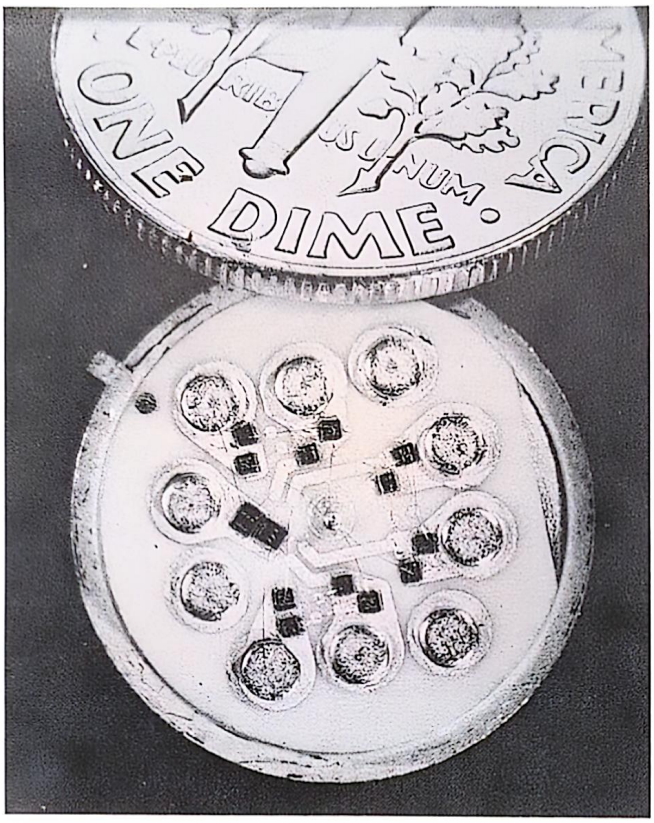
With one qualification. We are face to face with this system, in a double situation, an insoluable "double bind" exactly like children face to face with the adult universe. They are simultaneously summoned to behave like autonomous subjects, responsible, free, and conscious, and as submissive objects, inert, obedient, and conforming. The child resists on all levels, and to a contradictory demand he also responds with a double strategy. To the demand to be an object, he opposes all the practices of disobedience, revolt, emancipation; in short, a total claim to subjecthood. To the demand to be a subject, he opposes just as stubbornly and efficaciously with an object's resistance, that is to say, in exactly the opposite manner: infantilism, hyperconformism, a total dependence, passivity, idiocy. Neither of the two strategies has more objective value than the other. The resistance-as-subject is today unilaterally valorized and held as positive—just as in the political sphere only the practices of liberation, emancipation, expression, and constitution as a political subject are taken to be valuable and subversive. But this is to ignore the



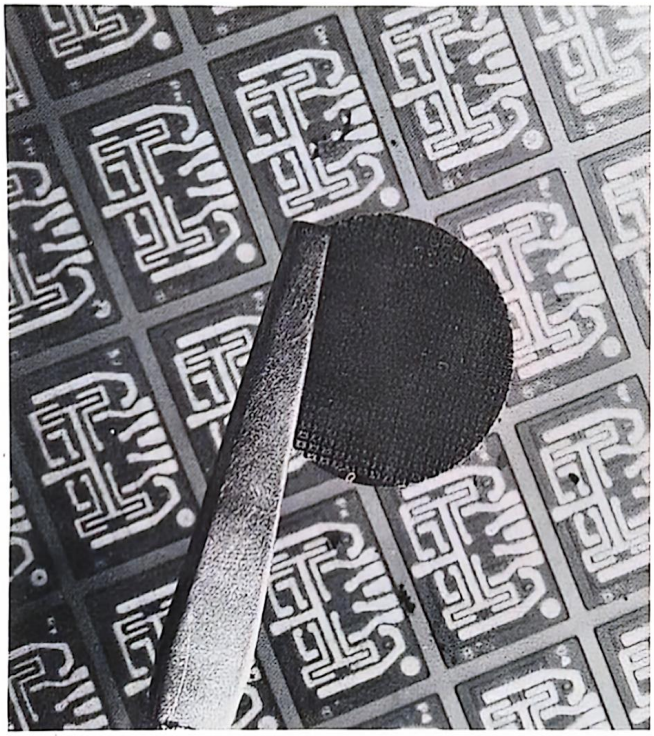
Western Electric Advertisement.



CBS Transmission Center, New York, N.Y. Television sound and pictures are now combined by diplexing equipment before transmission. When President Carter addressed the nation from Kansas City on July 16, 1979, the combined signal was sent on one Bell System microwave route to this CBS Transmission Center in New York City. The oscilloscopes below the monitors display the video portion of the diplexed signal. The meters under the oscilloscopes indicate the audio level. From New York, the diplexed signal was sent over the CBS network, on one transmission facility. The specifications for this diplexing equipment were prepared by Bell Labs in cooperation with AT&T, Long Lines, and Network Transmission Committee. (Bell Labs).



High-speed integrated logic package consists of three separate flip-flop circuits assembled together on a single header. On the 11-lead ceramic header, all circuit interconnections are made using gold thermo-compression bond wires. This device contains six transistors (two are required for each flip-flop) and twelve resistors. The individual flip-flops perform their switching functions with typical operating times of approximately six nanoseconds. (Bell Labs).



Transistor Invention. (Bell Labs).

equal impact, perhaps even superior, of all the practices-as-object—the renunciation of the position of subject and of meaning—exactly the practices of the masses—which we bury and forget under the contemptuous terms of alienation and passivity. The liberating practices respond to *one* of the aspects of the system, to the constant ultimatum to make of ourselves as pure objects, but they don't respond to the other demand, which is to constitute ourselves as subjects, to liberate ourselves, to express ourselves at any price, to vote, produce, decide, speak, participate, play the game—a form of blackmail and ultimatum just as serious as the other, probably even more serious today. To a system whose argument is oppression and repression, the strategic resistance is the liberating claim of subjecthood. But this reflects rather the system's previous phase, and even if we are still confronted with it, it is no longer the strategic terrain: the system's current argument is the maximization of the word and the maximal production of meaning. Thus the strategic resistance is that of a refusal of meaning and a refusal of the word—or of the hyperconformist simulation of the very mechanisms of the system, which is a form of refusal and of non-reception. This is the resistance of the masses: it is equivalent to sending back to the system its own logic by doubling it, to reflecting, like a mirror, meaning without absorbing it. This strategy (if one can still speak of strategy) prevails today, because it was ushered in by that phase of the system.

A mistake concerning strategy is a serious matter. All the movements which only bet on liberation, emancipation, the resurrection of the subject of history, of the group, of speech as a raising of consciousness, indeed of a "seizure of the unconscious" of subjects and of the masses, do not see that they are acting in accordance with the system, whose imperative today is the overproduction and regeneration of meaning and speech.

[1] Here we have discussed information only in the social register of communication. But it would be fascinating to consider the hypothesis within the framework of the *cybernetic* theory of communication. There also, the fundamental thesis would have it that information would be synonymous with negentropy, the resistance to entropy, and an excess of meaning and of organization. But it would be fitting to pose the opposite hypothesis: INFORMATION = ENTROPY. For example: the information or knowledge about a system or an event that can be obtained is already a form of neutralization and of entropy of this system. (This applies to the sciences in general and to the human and social sciences in particular.) The information in which an event is reflected or through which it is diffused is already a degraded form of the event. One would not hesitate to analyze the intervention of the media in May 1968 in this sense. The extension given to the student action permitted the general strike, but the latter was precisely a black box which neutralized the original virulence of the movement. The very amplification was a mortal trap and not a positive extension. Distrust the universalization of struggles through information. Distrust campaigns of solidarity at every level, this solidarity that is both electronic and worldwide. Every strategy of the universalization of differences is an entropic strategy of the system.

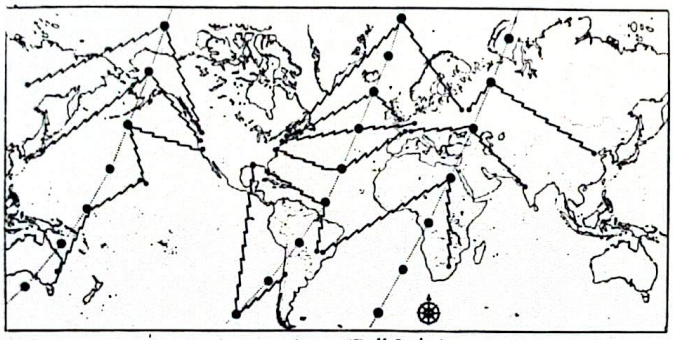
[2] Stammheim was a member of the Baader Meinhoff gang killed at Mogadiscio, Somalia when a West German anti-terrorist squad stormed the airplane he and others had hijacked.

Book Review

THE GEOPOLITICS OF INFORMATION

Anthony Smith
Oxford University Press

B. P. Menon



Echo: transmitter-receiver stations. (Bell Labs).



President Kennedy signing legislation to establish globe-circling system of communication satellites (August 31, 1962). Left to right: Congressman Oren Harris (D-Ark.), Senator Warren G. Magnusan (D-Wash.), Senator Mike Mansfield (D-Mont.), Senator Richard Russel (D-Ga.), Senator Hubert Humphrey (D-Minn.), Joseph Beirne, President, Communication Workers of America, Congressman William L. Springer (R-Ill.), Senator John O. Pastore (D-R.I.), unidentified, and FCC Chairman Newton N. Minow. (Bell Labs).

The first inkling I ever had of the geopolitics of information came when I was six years old, in the "first standard" at Miss B. Hartley's school in Calcutta. Our textbook for geography, a leftover from the then recently extinguished British Raj, described "hill stations" as "places where white people go during the hot summer months." Miss Graham, our teacher, a leathery grey-haired white woman (whether Anglo-Indian or not was a matter of speculation), had us underline all the important definitions in the book. When she came to "hill stations" she bowed to the realities of independent India and had us underline the sentence with the exception of the word "white." The underlined definition read "hill stations are places where people go during the hot summer months." I thought nothing of this definition till my mother chanced upon it while supervising my homework. I heard her snort. She muttered something under her breath, reached for my pencil, and obliterated the entire sentence from the page.

As far as I can see, the call for a New World Information and Communication Order, for which UNESCO is regularly criticized in the Western press, is based on sentiments similar to those of my mother—a desire on the part of the leaders of the world's poorer countries to protect their people from the subtle and not-so-subtle racial and cultural propaganda of the rich countries of Europe and North America. Most Western journalists, especially those who have taken an interest in the debate on this matter, will of course snort at my use of the word "propaganda." For them it is but "free flow of information," with good lads like themselves (and increasing numbers of lasses) doing their objective best to report the world as it is. Attempts to discuss the imbalances in the flow of world news (with most of it going now from the rich countries to the poor), they see as a threat to the freedom of the press. And UNESCO, they think, "under the influence of communists and radical Third World governments" is trying to "license" journalists when it dares speak of acceptable standards. What most Western journalists fail to notice is that such reactions provide the best example there is of the overtly propagandistic role of Western mass media. The popular fears and suspicions attached to the whole matter of the Third World's desire for change in the global order of things are not accidental. They have been deliberately fostered and are the defenses of an entrenched moral and economic value system. It is not hard to see that the fears raised by Western commentators on the matter of Third World demands for change are bogeys. They result either from a gross misunderstanding of facts or, in a distressingly large number of cases, from deliberate distortions and lies. For the benefit of those inclined to dismiss this as (to use phrases I have heard in this regard) "unreal," "paranoid," or "super-sensitive," let me present here some concrete evidence, an annotated version of a "news story" that appeared in *The New York Times* on 28 June.

U. N. Gave $432,000 To the Foreign Press To Publish Its Views

By BERNARD D. NOSSITER

Special to The New York Times

UNITED NATIONS, N.Y., May 27 — The United Nations has acknowledged giving subsidies of $432,000 to 15 foreign newspapers for supplements promoting the organization's view on aid to the third world.

The newspapers receiving the money included Le Monde of Paris and Asahi Shimbun of Tokyo, each of which received the maximum grant of $48,000, according to a table supplied by the United Nations.

A 16th paper, Jornal do Brasil of Rio de Janeiro, said it ran the supplements but refused the grant as improper.

A Japanese Provided Money

The money was provided by Ryoichi Sasakawa, an influential conservative Japanese businessman who has supported the United Nations financially before. His help with the supplements was solicited by Genichi Akatani, a former United Nations Under Secretary General for Public Information. Mr. Akatani obtained $1.25 million, according to his Japanese successor, Yasushi Akashi.

None of the supplements, which appeared quarterly, were labeled advertising, nor did they contain any references to the grants. They consisted of articles written by the participating newspapers and by United Nations agencies. Each participating paper was required to carry three articles produced by the United Nations, according to Leila Doss, director of the division for economic and social information in the Department of Public Information. Some of the articles written by United Nations officials were identified as such in at least some of the papers.

Reached by telephone in Paris, Le Monde's director, Jacques Fauvet, said, "It is desirable to support the north-south dialogue," and he added that he saw "no reason to refuse" the money. Mr. Fauvet said he did not know that his paper was required to run in each supplement at least three articles prepared by United Nations agencies.

He said that decisions on what went into the supplements were left to Jean Schwoebel, Le Monde's former diplomatic correspondent, who receives $69,600 a year from the United Nations as the project's coordinator.

In Rio de Janeiro, Walter Fontura, editor in chief of Jornal do Brasil, said his newspaper rejected $24,000 to reimburse the paper for newsprint because "we do not feel it is proper to receive any kind of subsidy." He said, "It raises a question with respect to the material."

Mr. Fontura said he tried to persuade the other 15 newspapers that participated to reject the subsidies, "but I was not applauded." Without the money from the United Nations, he did not feel obligated to run its articles. His supplements carried only material chosen by his editors and supplied by the participating newspapers.

Meeting Now in Geneva

What happened to the rest of Mr. Sasakawa's $1.25 million gift is not clear.

1

This is incorrect. The aim was not to promote the U.N. or its view but to get a wide-ranging exchange of different views.

2

The use of the word "acknowledge" is calculated to make it seem as if the U.N. had previously tried to hide this information. In fact, the project was announced to the press in 1979. Press releases, leaflets and booklets on it were released. *The New York Times* itself was asked to participate in the project. A letter from its publisher, Arthur Ochs Sulzberger, said: *"It is with great regret that we shall not be able to participate. I do hope that you will find other newspapers that will be able to cooperate and I look forward to seeing the product of your ideas."*

3

No representative of the *Jornal do Brasil* ever said at any meeting of the editors that the grants were improper.

4

The payments covered a part of the newsprint costs. If this made the supplements "advertisements" then all stories filed from U.N. Headquarters by *The New York Times'* correspondents should also be labelled as ads. For the *Times* has accepted free office space at the U.N. for over three decades. The cost of this runs to several hundred thousand dollars.

5

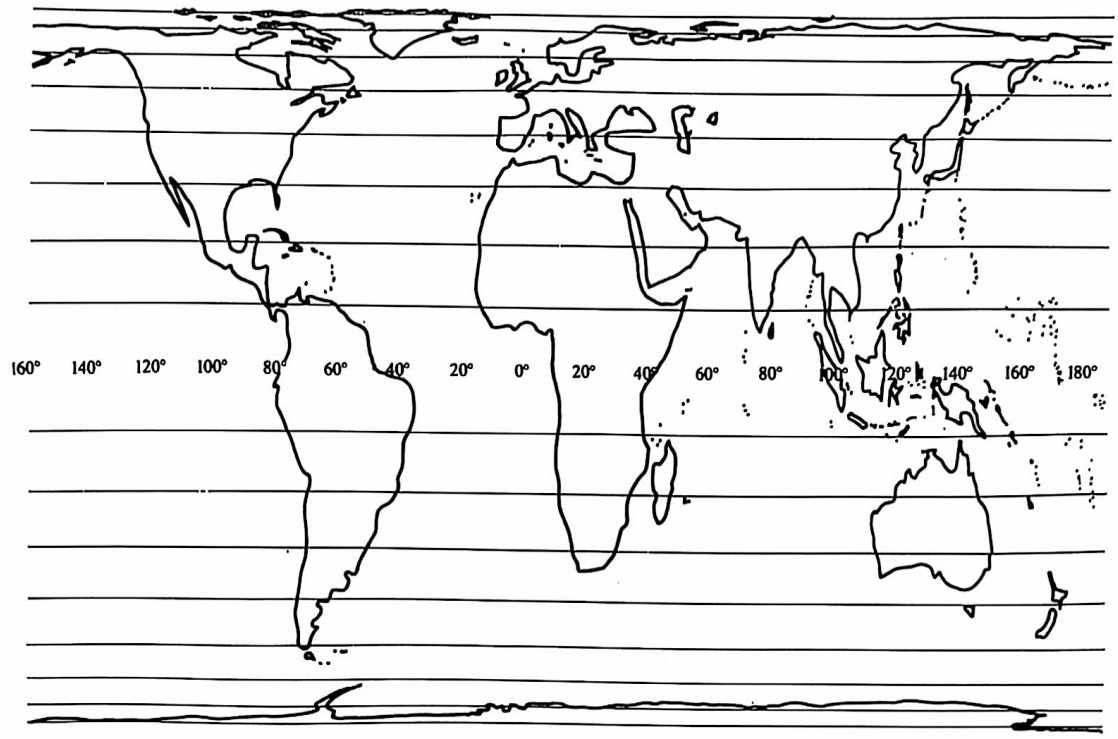
The concept of the North-South dialogue, central to the whole project, is mentioned here for the first time in passing.

6

The attempt here is to contrast the Mr. Clean image of the *Jornal do Brasil*—a newspaper which has thrived under one of the most repressive military juntas the world has seen—with the impropriety of the other papers involved. The unstated—and absurd—premise here is that the U.N. bribed some of the most independent papers in some of the most openly democratic countries of the world. And that it did so with a few thousand dollars!

7

By saying this is "not clear," young Bernie makes it sound as if murky things were afoot. The information was not only available, it was given to him.



Peters projection

This map is based on Peters Projection rather than the more familiar Mercator Projection. It represents the more densely settled zones of the earth in better proportion to each other than does the Mercator Projection, and is thus considered an important step away from Eurocentric concepts of geography and culture.

What is the North-South dialogue?

THE demand for the New International Economic Order originated from a group of developing countries in Africa, Asia and Latin America. They form the "South" of the world in relation to the developed countries of Europe and North America. The discussion of global economic change between the rich and the poor has thus been dubbed the "North-South" dialogue, although the geographical south does include such developed countries as Japan and Australia. Also, the socialist countries of Eastern Europe object to being lumped with market economy countries in the "North", but the phrase has been too convenient to fall into disuse. In the years since the call for a new world order the dialogue has settled into negotiations on a number of subjects and it would be more correct today to speak of North-South *negotiations* rather than of dialogue.

When the United Nations General Assembly called for the New International Economic Order it did so by consensus. But this consensus hid serious differences between the developing country group and several of the richest countries. In essence, their differences turned on the issue of whether the existing order of the world economy could be reformed or whether it needed to be structurally changed. Developed countries which had benefited most from the post-war economic system were loath to support basic changes. Developing countries, many of whom had not participated in the creation of this system and few of whom had benefited from it, saw no reason why a new order should not be negotiated from the basics.

Since 1974 the dialogue and the negotiations between the developed and developing countries have been almost continuous. In a number of forums they have dealt with all the major issues involved in changing the world's economy. This includes trade, money, food, industry, science and technology, transport and communication.

The process has involved governments in major world conferences. It has brought countless panels of experts to study specific aspects of the subject. It has involved reports from eminent commissions such as those led by Willy Brandt of the Federal Republic of Germany and Sean McBride of Ireland. Non-governmental organizations have participated, as have journalists in influential sections of the media.

In the closing years of the 1970s there was general recognition that North-South negotiations were in the doldrums. Important advances in several areas had been made, as described in the following pages, but the urgent and comprehensive action necessary to deal with a range of serious problems had not been taken. In 1979 two important conferences —the fifth United Nations Conference on Trade and Development (UNCTAD V) in Manila and the third General Conference of the United Nations Industrial Development Organization (UNIDO III) in New Delhi—were both disappointing in their results. The Tokyo Round of trade liberalization talks, which had as a primary aim the benefit of developing countries, also ended in 1979 with the bitter refusal of developing countries to sign the final protocols.

from *Towards A World Economy That Works* (United Nations, New York, 1980).

However, the editors of the newspapers involved or their representatives have been meeting every three months at the fund's expense in Vienna, Paris and other cities to choose themes and the contents for the supplements. They are in Geneva now to look for fresh funds. Generous expenses are allotted them, and Mr. Fontura said he had dismissed one of his staff members who accepted a cash allowance.

What the United Nations received for its money is unclear. Mr. Fontura said the project "is not contributing to a dialogue."

In one issue, a long article by Bhaskar P. Menon of the United Nation's Division for Social and Economic Information, deplored the fact that the "new international economic order" had not been enacted. But Mr. Menon did not explain that this is the term used to refer to an enormous transfer of goods and services from rich to poor through the erection of commodity cartels, the printing of money by the International Monetary Fund, big increases in aid and similar devices. Mr. Menon simply described all this as the "decolonization of the world economy."

Others Also Omitted Details

Mr. Schwoebel, the coordinator, wrote that the supplements should persuade readers to "make sacrifices" for a "new economic and social order." He, too, omitted details. Similarly, Secretary General Kurt Waldheim said the supplements would "help to foster a better understanding of the vital objectives of the new international economic order" but left out specifics.

A supplement that appeared last fall in Dawn in Karachi, Pakistan, carried a story from Zycie Warszawy of Warsaw, another of the participating newspapers, attributing inflation in Communist countries to imports from the rest of the world; an article by a World Health Organization writer on the group's workers in Thailand, and a staff-written review of Western inflation that traced its roots to the "struggle" between "monopoly profits" and unions.

The first supplement appeared in mid-1979. According to Miss Doss of the United Nations, the newspaper grants ran out after a year. The Frankfurter Rundschau of Frankfurt, which had a $24,000 subsidy, and Die Presse of Vienna, which received $16,000, then dropped out of the group, she said.

Now Mr. Sasakawa's gift is exhausted, so Mr. Schwoebel has asked the United Nations to appeal to the General Assembly for $200,000 to attract more money. Opposition from the United States, Britain and other nations is regarded by United Nations officials as certain to kill this plan.

Mr. Schwoebel has said that three oil countries, Algeria, Venezuela and Kuwait, might replenish the fund, which would raise fresh questions of influence. Mr. Akashi, the United Nations information chief, said, however, that he would not hesitate to administer money from such governments.

The other papers in the project and the subsidies they received were La Stampa, Turin, Italy, $40,000; El País, Madrid, $24,000; Politika, Belgrade, Yugoslavia, $32,000; Zycie Warszawy, Warsaw, $40,000; Magyar Nemzet, Budapest, Hungary, $24,000; El Moudjahid, Algiers, $24,000; Le Soleil, Dakar, Senegal, $16,000; Excélsior, Mexico, $24,000; Indian Express, New Delhi, $40,000; Kayhan Newspapers, Teheran, Iran, $16,000; Dawn, Karachi, $16,000.

8

The "generous expenses" were standard U.N. per diem payments which barely cover the cost of hotels and food. The throwaway reference to an unnamed person fired for accepting "a cash allowance" is the very worst type of yellow journalism. It has nothing to do with the U.N. project.

9

This conflicts with the earlier assertion that the supplements promoted U.N. views.

10

An absurd characterization of the New International Economic Order.

11

The quote on "decolonization" is falsely attributed. The full quote in the article reads: *"Developing countries are asking nothing less than the decolonization of the world economy, their own complete economic emancipation."*

12

A mild version of McCarthyism—code words to set off anti-communist alarms. Again the quotes and assessments are lifted out of context.

13

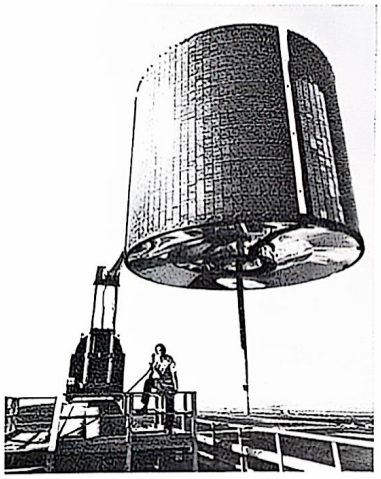
Does not mention the fact that the other newspapers carried the supplements for the second year without financial support. In doing so, the papers in developing countries were making quite a sacrifice as their newsprint is expensive, in short supply, and imported.

14

"Such" governments conjure up all the sinister images the press here has succeeded in attaching to OPEC countries.

15

Young Bernie was told *the Kayhan* did not participate although it was willing to. Its inclusion here is for obvious jingoistic reasons.



Early Bird: first commercial communications satellite underwent tests at Hughes Aircraft Company before it was shipped to Cape Kennedy for launching. Satellite is raised skyward on long boom on radio frequency range to test antenna. Built for the Communications Satellite Corporation, *Early Bird* weighs about 85 pounds after placement in synchronous orbit of 22,300 miles above earth. Positioned over the Atlantic, it provides 240 two-way telephone channels or two-way TV between Europe and North America. Satellite is also capable of carrying teletype, facsimile and high-speed data. (Bell Labs).

Telstar I: At Cape Canaveral Bell Labs engineer sights through a telescope attached to radar antenna at the Delta rocket carrying *Telstar* satellite into orbit. (Bell Labs).



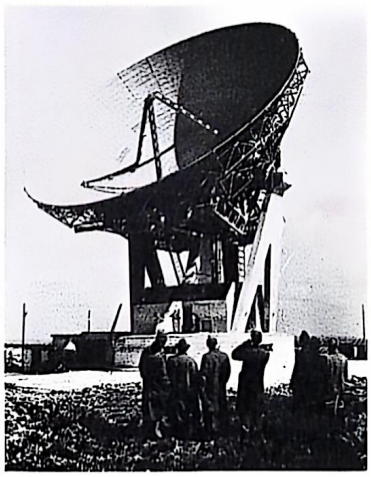
After this story appeared on page one of *The New York Times,* it was picked up by the major wire services and distributed worldwide. *Newsweek* did a story titled "the U.N. Buys Some Good News" (though even a cursory examination of the international supplements would have shown that nearly all the news was bad). *The London Times* and the *Guardian,* also in London, carried the Reuters version of *The New York Times* story without any effort to verify its accuracy. Newspapers in developing countries gave only muted attention to the story but they did seem to accept as true the allegations made. Though the papers participating in the World Newspaper supplement project were aware of the facts and reacted with appropriate indignation, the damage to the U.N.—and to the Third World—in the eyes of world public opinion, was considerable.

To those of my readers who are at this point shaking their heads and preparing to dismiss me as yet another communist-inspired Third World radical, let me hasten to introduce the excellent book by Anthony Smith, *The Geopolitics of Information.* Its subtitle is *How Western Culture Dominates the World.* Anthony Smith is director of the British Film Institute in London, a veteran of BBC radio and television, author of several books on broadcast and print journalism. An eminently *Un-Third World Non-Communist* personage by any standards.

The book is a short one: 192 pages. But it is well researched, clearly written, and honestly argued. If you want a clear grasp of the current debate on world information this book is essential. It covers the ground from the "Old International Information Order" to "Cultural Dependence," to "News Imperialism" and "A New International Electronic Order." It ends with a chapter that asks the question: "Double Standards of Freedom?"

To commend the book, however, is not to agree with all its conclusions. Anthony Smith *sees* the Third World point of view; he does not by any means agree with or represent it. He sees, for example, as did UNESCO's MacBride Commission, that the current debate over information is not entirely centered on differences over Western traditions of a free press. As the MacBride Commission puts it, and as Smith quotes: "Many people have come to realize that sovereignty, identity and independence result not only from formal political decisions but are also, and perhaps even more, contingent upon the conditions of cultural and economic life... in short, upon circumstances which affect, in an increasingly interlocking fashion, the overall development of each and every nation."

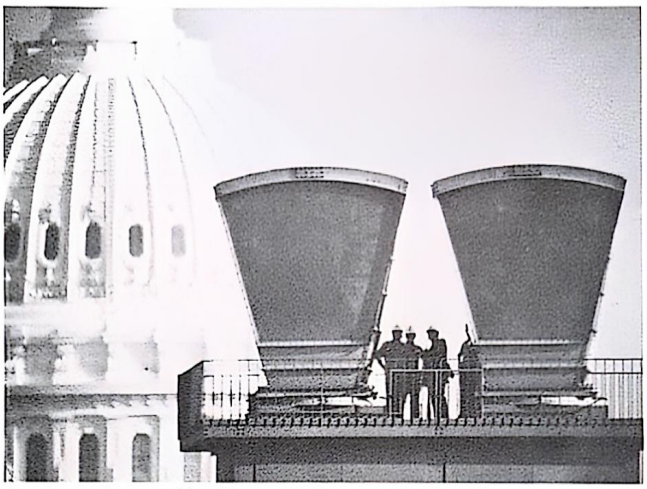
Smith argues that "the existing information order of the world is a product of and has itself extended the historical relationship between the 'active' and the 'passive' civiliza-



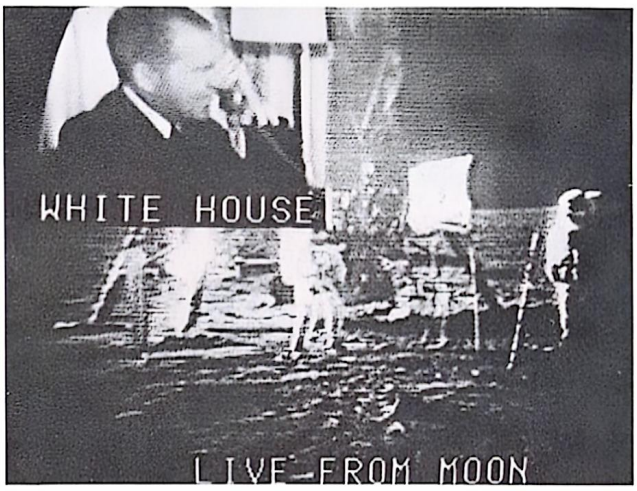
Telstar I (Earth Station) Goonhilly Downs, Cornwall, England. 85-foot paraboloid mounted on concrete azimuth. Structure turns on large ball bearings and is turned by bicycle chain. Two concrete 'A' sections hold elevation structure and steel dish. (Bell Labs).

Telstar I (Earth Station), Andover, Maine: construction of 177 foot long reflector antenna used in satellite communications which began with launching of *Telstar* in spring of 1963. (Bell Labs).





In sight of Capitol building, Washington, D.C. technicians complete link in continent and ocean-spanning telecommunications network. (Bell Labs).



Project Apollo. Live satellite transmission. (Bell Labs).

tions, the seeing and the seen, imperial and empire, exploring and explored. The prosperous nations of the North have not come to terms with the fact that they are now being obliged to be themselves 'observed' as the relative political status of the great power blocs is beginning to change. They are insisting upon their cultural prowess, even where their economic and political power has diminished." But will there be a more balanced flow of news in the future? No, says Smith: "There is no chance that the Third World will generate a large volume of independently sold and internationally acceptable information about itself until more developing nations establish the principle of a free press which, again, is unlikely..."

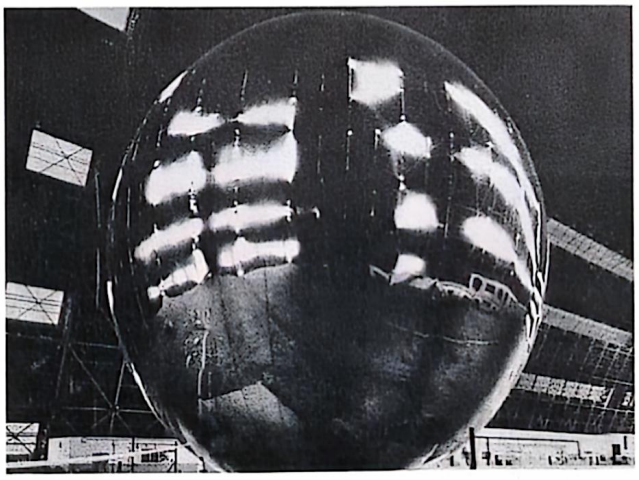
This raises the question of what a free press is: free from what, or whom? In rich Western countries the answer is obvious: free from the apparatus of government. But this is possible only because the media have the support—and are in fact largely funded by—private commerical interests. In most developing countries this option does not exist, for the simple reason that the private commercial sector is either (a) largely foreign owned, (b) rigorously controlled by the government and utterly beholden to it, or (c) non-existent. Also, in the post-colonial situation of many poor countries, the governments include the champions of the popular interest while businessmen—including private publishers of newspapers—have, to put it kindly, mixed loyalties. This is one reason why we find certain clown-like figures from the Third World attending the parleys of Western newspaper publishers and adding their names to declarations that go against the interests of their own countries and people.

Even among journalists (usually people at the fine cutting edge of change), it takes time for colonial attitudes to pass. In India, for instance it took a change in generation before the perspective of the establishment press became "un-colonial." (A perfect example of the colonial mentality of the older generation of editors in India was the black-bordered full-page stories published on the death of Winston Churchill, as old and steadfast an enemy of India as there ever was.)

The larger point which Smith makes about the importance of a free press in the Third World is, of course, a valid one. Poor countries can for entirely understandable reasons opt for local control, but the politicians and bureaucrats in charge are then incapable of journalism. They succeed only in boring people with the official view, of creating a thriving market for rumor and distrust among their own population. And of course, they fail too in altering global news flows. But we in the Third World must ask what is the alternative. Leave ourselves open to the tender mercies of Western journalism and monopolies? No thanks.



Telstar I (Earth Station), Pleumeur, Brittany, France. Ground station built by French National Center of Telecommunications Studies. Radome looms over countryside. (Bell Labs).



Echo (Bell Labs).

Aaron Fogel

JOSEPH DREAMING

The straphanger colors the glass squares
And, midasized, shoots his still gaze on
A hundred skimming girls who cancel
La Llorona, being multiplied.
More is more, is burning happiness.
All the women toss their thighs onto
His face as onto a fire, laugh,
Discarding indifferent the cracked books.
The scholar studies in the subway,
Learning the thousand things worth learning.

Fingernails on a Consumer Reports,
Frenzied tv watching, nervous buys,
Let's quiet down now and spread the word
With our fingertips after wetting them.
If it's good you don't need saliva.
To shmear means to bribe in New Yorkese.
There's an enormous mess by the bed,
Books, papers, soda cans, tv guides,
All on an Afghan rug that they bought
When they first got there for its beauty.

The bird puffs up. The man expresses anger
And feels calmer. Psychological
Truths mask the greater, that
Self-restraint makes you ragged, human,
And holds the hatchback world together,
Holding the paperback world together.
Don't hide from this in an argument
About poetic form, about whether
Poems should be formal or free.

They look down on the generation
Right after theirs as hollow and sad.
Theirs was distributional, in facts,
Sleeping around, and collecting
Passionate books about politics
And poetry bound expensively:
Since people also wet their fingers
For counting bills, a gesture meaning
You worry about giving too much
To someone else; and here they are,
A little forthright, very happy,
And morally ready to sign off.

Worshippers of the word "career,"
Leibniz's word, a calculus sound,
A word that has two, or is it three,
Syllables, wave and-or particle,
Science cliches that thwack the tabor,
What were the smallest peoples saying ?
My room, our room. You're home; you find me
Lost in the literature and beer cans
And confront me. What follows is great.
This wedding has been sanctified twice.
What do they say to other people ?

Figure the variables yourself,
Statisticians and Pharisees,
The kinds of speaker, and audience,
Dialogues, from eristic to talk show—
Knowing the history of speech
And loving talk—are they exclusive ?
Jesus Christ! is a speech act for which
Jews are scolded in Indiana.
Jesus Christ what a lot of nonsense.

The bed, the television, the books.
This is the scene of many scenes.
The primal scene; the broadcast; sowing.
Jesus's metaphor was wine; now
Dissemination's the metaphor
That wind is spirit carrying the
Grain to all the extant apartments,
The scene of scenes, watching the show of shows
Jesus's death a speech act, like the name;

Exclamation, talk shows, and shouts.

In late afternoons the son is home
To relieve him in the stationery
Store, so if I've bought the paper from
The father in the morning, I get
The lottery tickets from the son.
No parable. The son's out of school,
Complacently selling lottery
Tickets in surprisingly big batches
To work-messed people—since chance is "people,"
Meaning number, and the most abstract
Twentieth century art was nearer
To a representation of people.
The torn stubs with the graphic edges
Are the tiredness of the collage.

To them it's a neotechnological
Activity, poem writing, and otherwise
Pitiful. Oddly enough this comes
From formalists, the store's twelve brothers,
The colorful one in the back or pit,
Psalterer in innocent singing,
Critical list reorganizer
Of the cry, and now (since that time),
There's been not enough time remaindered
In this place, with all its formal products
To yawn, or to caress, or laugh,
Let alone to have children or feed
The selfish animal with popcorn
In this perfect ecological zoo,

This critique of all media
Thought out for life but echoing
Some syllabary of misery as joy.
It isn't their fault they can't see
Past the bars to find out that better
Is better—how critical can you
Expect us to be when at last
The music's beautiful ? To face
That loneliness your eyes must be
More bright and more able to bear more
Hallucinatory light than those
Of Borges' Library, that had been looking
At thirty black ribbons thirty years.

Synthetic fabrics, washed and rewashed,
They bathe in the warm signs, reading night
After night, lit up, assigned, and never
Really changing permanent color.
Synthetics will not bleed: they only
Go bright-dark during the excitement
Of an immersion that's false because
Synthetic fibres do not absorb.
They sit with paperback spirits hunched.
John the Baptist, John the Gospeller
Disapprove of their back-breaking work.

And also, all the small lamps are laughing.
"An emblematic representation.
'Cleanliness is next to godliness.'
A Bible next to a box of Tide."
Relax horizon can handle it.

All of the nine-syllable slogans.
Those who used to tape mouths shut,
Are videoing the small mouthes open,
The children producing poetry,
Feelings, real feelings, in the rhetoric
Of an induction, the kind that kills.
In the killed world the children taunt
The Faustus, "Ring around the scholar!"

This is also an ugly music. We're
Ashamed when the tape-recorder plays back.

It's called the after-life; two boobs
Wind into each other with a scared
Voice in the middle, an opinion.
In this new desert, Ruth, detecting
The voice of the thinker goes quiet,
Knowing that the dream interpreter
Is Joseph, the economic planner.

The neotechnological dreamer,
And this in fact was the Bible's point,
Gives abundance for seven years,
And then starvation, while he grows rich.
The story of neorealism.
Nineteenth century eccentricity
Meant freedom, a patent metaphor.
Now it's that chance is people, lotteries are
Fate on the one hand, freedom on the other.
It doesn't work, just like the others.

The more the voice spreads out without
Authority the more grubbily
It gets hassled as bad poetry
That doesn't condense enough, contract.
If it relaxed so completely that
There was no texture at all, no glass
Glaze reflecting itself, just sweet, not even
Desperate relentings like a
High-wire that curves down to the ground,
A career any fool could have,
Would that give hope to the inspired
Career vacuums to breathe less archly?

The remnant sabbath is apathy.
When you realize that you're a worker,
And perceive the joy of the bad songs,
Then the eristics and erasures
Become a pomp that is dangerous,
You see that they mean people crossed out
By professorial arrogance
Masquerading as nonassertion,
The ads, "just because they are there,"
Like the stray yachts that Williams wanted,
But this finishes off the list now,

And who knows how to complete a list ?
No one but Tyrannos de Bergerac,
The simple public man, whose blender
Company makes mixers, blending brides
Into the cakes. "The world's a wedding."
A weeding also, and not discriminating,
Either, I think. Generative grammar
Was Noah's idea, the flood that structured
In the animals, not the first time
That words and people had been scumbled
By a Judaeo-Christian drunkard,
Whatever that is, in August-July.
The grotesque bugs of August hover,
A little beauty in the stagnant air.
They broadcast, one hears, they sow the word.
Do they, "indeed"? In the vita nuova
The subtle subway ladies are laughing.

If there is this broadcast and sowing
And telecommunication into
Nomads and monads by career winds,
So that man is finally standardized,
And woman later, warmer unveiled,
So that the show is people, there's also
This paperback thrown into the fire
Spreading the word with a dark corona
As when the light burns through the film the
Audience hoots for reillusion.

A STONE CORRAL

1.
Looking at the land: how they've tended.
There are no visual analogies in it.
The house isn't an analogy of the rock.
The wood slats painted white in no relation
To the trees. Each one its own shape
Is a they or a group that can't be
Divided when you see them together.
They share a wire. They slope downwards
In a single line. What a place this is:
The cliff in the middle of the woods
Twenty feet high at its highest is made up
Of planes that all slope down towards
The wild beast pound, a corral of stones
Piled thin and black where work animals
Lost from other villages were herded
Till they came for them. They.
And the particular way each hill slopes
Because of the way it was tended characterizes
The work they did. The stones in
The little cemetery called Dawes erode.
The barbed wire's long linear knitting,
Birds on wire trying to be wire
Surrounds or frames the farm in a large square.
The wire is a square surrounding the farm,
The stones a circle surrounding space.

2.
We could put a show on at this corral
And call it Sinai where the cliff falls back.
The old man scolding on resisting feet
Would dislodge down. We walk up hill.
The first voice of a people is often stolen
To write the diatribe against their life,
Like a friend who listens to a story
To write some novel about it for a grant.
Let's not put that frenzy in the puppets now.
You and me, blue and red, in the waist-high court,
Slate shattered, built up in small black lines,
Darker, with white streaks, practically slate,
Less dramatic, more low-airy than Stonehenge,
Absorb the roundness of the corral,
Then out to the main road where the wire's
Like something knitted by someone naked.
Each is its own shape. And the "wild beasts,"
The old New England name referring to strays,
To all domestic animals on strolls,
Were kept here in small groups in the quiet slate.
Animals in poems always mean resignation.
Each past is a they that was once together.
The animals trapped and described are they.
You and me are the colorers of the scene.

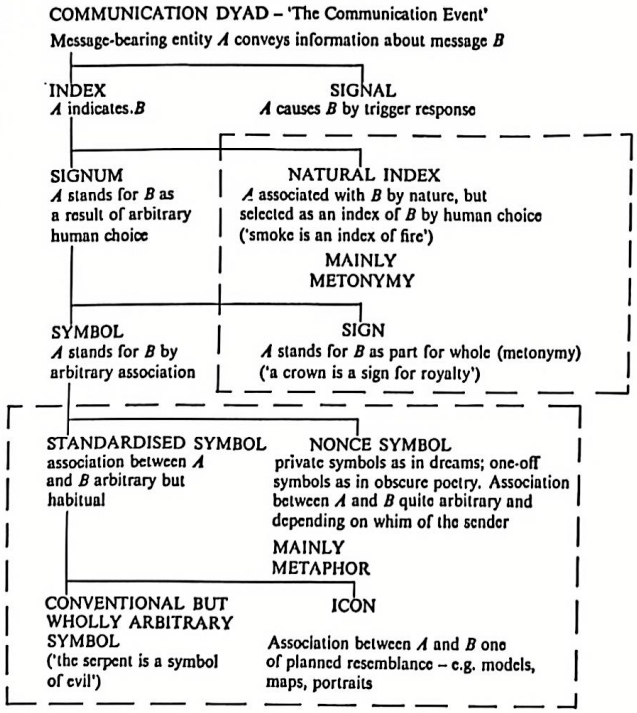
3.
The stone corral is a dark room
Without a ceiling—a place
Where something moves, and nothing happens.
The room is dark in spite of light
Overhead from the absent ceiling.
The forest's the room for the wild beast.
The sky moves overhead. The beast
Moves in the pen, and nothing happens.
Photographer in the corral,
Print: you have a light overhead.
You are moving and nothing happens.

4.
At the horse pull they harness work horses
To larger piles of concrete bars each round,
Until at fifteen thousand the last team
Pulled resisting backwards to the link
Drags it a few inches, and the farmers
Who bring folding chairs to the fairgrounds
And their fat wives applaud indifferently
And stand up. These horses live for six years
Instead of twenty, going the rounds of the fairs.
In night red lights the men in three drag them backwards.
The first one hops over the loop to insert
The hook. He misses, and the horses break forward
Without a connection, have to be dragged back again,
And as the night goes on, the weights heavier,
The horses are harder to drag backwards.
Their feet bleed. The men beat the horses
And another team of three men, calmer, smoothes the ground
That the flat of concrete slabs rides over.
The women from the arts community here
Complain to me about brutality
To animals, and look ill, and look on.
The night goes on and the horses take longer
To be harnessed, their hearts overfilling.
Think of the Scots word reest which means balk:
And so they reest and they resist and rest.

THE MEANING OF THE CHIMERA:

BIOLOGICAL EVOLUTION VS. CULTURAL EVOLUTION

Harley C. Shands



The key distinctions in this schema are as follows:

SIGNAL The relationship $A : B$ is mechanical and automatic. A triggers B. The message and the message-bearing entity are simply two aspects of the same thing. All animals including human beings are constantly responding to a great variety of signals all the time.

INDEX 'A indicates B'. Signals are dynamic; indices static.

Culture and Communication, E. Leach (Cambridge University Press).

Icon to Symbol

In a small book that has had a large influence, the physicist Ernst Schrödinger has stated that when the physical researcher looks ever more deeply into the structure of matter, he never finds any substance at all; instead, what is discoverable is a series of shapes. Reality, according to this author, is to be seen as "Shape, pure shape." Since shape (or pattern, or form) is the subject matter of art, this pronouncement, from a most authoritative source, makes it clear that in the modern epoch art and science have flowed together into a single stream.

This confluence is the concern of a highly modern discipline, semiotics, which is at the same time perhaps the most ancient of preoccupations of self-conscious human beings examining human idiosyncrasy. The modern addition to the ancient subjects consists of the basic principles of a technology having to do with what might (in a medically-oriented universe) be called the anatomy and physiology of communication. The parts of the body as abstract forms are the subject matter of physiology. In semiotic-linguistic context, we find a very great similarity to the analysis of *signs* as the analogue of the bodily parts, and of communicational sequences as the analogue of *syntax*.

The traditional definitions of signs emphasize meanings; for my own purposes I have altered this terminology in order to explore some of the implications of the syntactical mode. I see every sign as some kind of *instruction;* its destiny is to be obeyed, rejected, or ignored. The most important consideration is, however, that it is only through an instruction (or, alternatively, a message) and its response that an anterior and a posterior context are linked. Thus it is the case that until the message has passed, there cannot be either a source *or* a destination. This means that the sign, instruction, or message is primary, the source and destination *retrospective rationalizations*.

The artifacts classified as modern art over a period of now approximately a hundred years constitute a massive instruction which has progressively recruited a consensus as more and more human beings respond affirmatively to the artifacts. The unbelievable popularity of the 1980 Picasso exhibition shows the spread of the instruction, "Come look at Picasso's lifework!" Early modern artists are already obsolete, and the most modern, or the *modern* modern artists are those who have most radically broken with ancient traditions in art that were, practically speaking, absolute until this past hundred years, more or less.

Modern art is self-consciously *iconoclastic*. This term is a central one to examine, in both its specific and its generic connotations. In order to ring the changes, it is useful to look at the notion of an *icon* in its semiotic context and to compare and contrast that series of meanings with others, especially those of religious connotation. Until recently art has come into being in close association with religious practices. I shall be especially concerned with what might be called the iconography of art in ancient Egypt, since it is there that the civilized human condition, in an astonishing fashion, leaped into being in a brief period, then remained static for three millenia. This gigantic mutation was so consensually selected as to remain continuously recognizable until the empire was finally disestablished in Rome. In this long period there were many changes in dynasty—but each such change led to the co-opting of the new personnel by the existing abstract instructions.

The basic unit of semiotic theory is the *sign:* a sign is a significant form. Any sign is divisible into reciprocal parts, called by Ferdinand de Saussure the *signifying* and the *signified.* In ancient terms, the pair is the *signans* and the *signatum.* Thomas Sebeok has emphasized the closeness of these terms to the idea of an *intelligible* and a *perceptible.* The most important implication of these reciprocals is that of showing in their basic form the mutuality of a present participle, indicated in English by the terminal *-ing,* and a past participle, with the terminal *-ed.* These conjoint terms indicate that what is in being is a combination of an action-in-process and an action-completed (a becoming and a being). The further implication is that the verb form is more basic than the noun form; any sign is defined by two nominalized verb forms. To echo Schrödinger, it is apparent that in the most basic sense there is no such thing as an object; there is only an objectifying (shaping) process.

To objectify the sign it is possible to find in Charles Sanders Peirce's work a triple set of categories by means of which to differentiate what might be called three universes of communication. Peirce's three categories are the index, the icon and the symbol. The index is part of the system to which it refers. In saying "Where there's smoke, there's fire" we are using the indexical sign smoke to refer to the fire-smoke system. An icon is related to its referent through similarity; in the most familiar usage of this term, icons are religious portraits of Russian origin. In the Catholic church, a special discipline is that of iconology, the study of the meaning of religious simulacra, and its written form iconography. The symbol in Peirce's categorization has its meaning because of the arbitrary assignment of meaning to such a sign by consensus; the most abundant symbols are words.

Progress in biological and cultural evolution can be followed through examination of these signs in their separate and conjoint functions. The first and perhaps most significant set of considerations are those having to do with time, as noted by Peirce. The index operates only in the here and now; in modern computer terms the index acts as an instruction on line, in real time. Its primary sphere of influence is in physiology: all physiologically active structures such as hormones and enzymes in a bewildering complexity in the circulating blood carry "to whom it may concern" instructions selected by (or selecting) the responsive systems joined in function by the circulating index. Its temporal context is the present.

The icon, based upon a model that already exists when the icon comes into being, must necessarily look backward, so to speak. The icon is therefore the principal medium of knowledge of the past. Traditional systems, oriented as they are to the preservation of what has been, are therefore the human contexts in which iconic symbolism is most evident. In my own imagination a very special place has always been held by the ancient Egyptian Empire where for three thousand years it could almost be said that in its basic written language time stood still. The central concern of the Egyptians was that of the preservation of form in the artifacts of the tomb as well as in the preservation of the actual bodies of the fortunate few who could afford the complex processes of embalming and mummification.

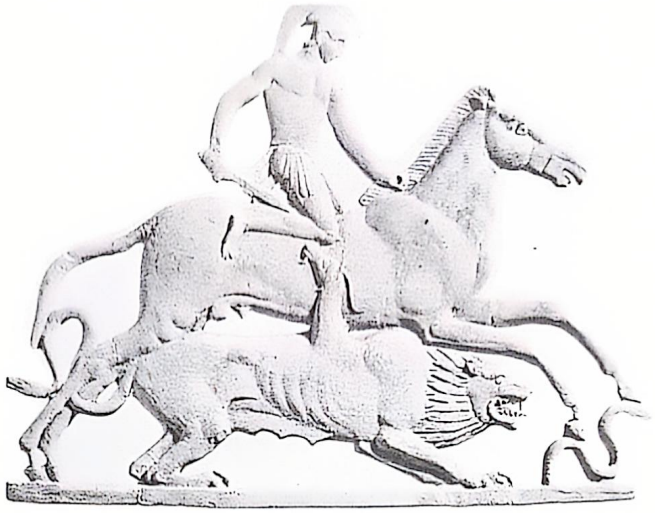
The symbol, because of its necessarily consensual support, looks forward. Any symbol must recruit a consensus; its



Blessing Christ, medallion of gold and cloisonne enamel. (From the border of a large icon.) Byzantine, from Djumati (Georgia), XI century. Metropolitan Museum of Art. Gift of J.P. Morgan (1917).

CHAIN WITH RANDOMLY DISTRIBUTED IMPURITY SPRINGS.. PHRV-A-0141-0715
VERNATIONAL FREQUENCY DISTRIBUTIONS AND THE SECOND ORDER PHRV-A-0141-0606
AND GAMMA RAY ANGULAR DISTRIBUTIONS FOR EVEN AND ODD PHRH-A-0618-0141
AND ANGULAR DISTRIBUTIONS OF THE CARBON-12(ELECT PHRV-A-0141-1007
THE EFFECT OF INTERNAL DISTRIBUTIONS IN A PACKED COLUMN ON JAFC-A-0062-1152
• THE EPIDAUROS LIMERAS DISTRICT.. COMPOSITION OF MUSTS O CCHN-A-0010-0201
IN THE TRI-STATE DISTRICT, MISSOURI, KANSAS, OKLAHO ECGL-A-0040-1407
SUPPLIED FROM VARIOUS DISTRICTS AND ISOLATION OF ESO YKKZ-A-0085-1090
TS WITH RADIATION SICK• DISTURBANCE IN THYMINE DECAY IN RA BFBM-A-6C-14-043
OF SOME 2,4- DISUBSTITUTED DERIVATIVES OF 1,4-D JCOD-A-1966-0208
DISUBSTITUTED AND 4,5- DISUBSTITUTED DERIVATIVES.. • 4-M JMTC-A-0002-0348
ROUTES TO SYMMETRICALLY DISUBSTITUTED FERROCENES.. • JCOD-A-1966-0251
H REARRANGEMENT TO 2,3- DISUBSTITUTED INDOLES.. • AND THEI JOCF-A-0031-0077
SYNTHESIS OF MONO- AND DISUBSTITUTED THIO AMIDES.. RSCF-A-1965-3623
S • PREPARATION OF 1,2- DISUBSTITUTED VINYL SULFINIUM SALT ANCF-A-0677-1140
PREPARATION OF 4,5- DISUBSTITUTED-1,2,3-TRIAZOLES.. JMTC-A-0002-0648
YDROCHLORIC ACID, USING DITHIZONE IN TOLUENE.. AND O,O,N-M CANM-A-0010-1247
S OF OSMOTIC AND SALINE DIURESES AND OF ETHACRYNIC ACID.. AJPH-A-0210-0241
I IMENES IN RELATION TO DIURETIC ACTION.. CERTAIN ETHYLEN NPDF-A-0614-1867
OF FUROSEMIDE, A NEW DIURETIC AGENT, ON RENAL CONCENTRA JPP-A-0644-0129
NTO NAPHTAL IN • DIURETIC EFFECTS OF INACTIN AND PI P RA-A-0127-0864
IC ACTIVITY OF RIONE • DIURNAL PERIODICITY IN THE METABOL AJPH-A-0210-0611
N VARIABLE•CONVENTIONAL DIVISION OF DIMENSIONAL AND ANGULA AINS-A-7019-5549
GROUPS DURING CELL DIVISION OF SEA URCHIN EGGS.. PNAC-A-0112-0137
OF COMPLEXES BETWEEN DNA AND ANTIMETICS WHICH AFFECT BICH-A-0635-0218
UES OF HIGHER • NUCLEAR DNA AND CYTOPLASMIC DNA FROM TISS JCLN-A-0627-0451
ACID AND LIGHT ON RNA, DNA AND GROWTH OF THE THREE NASAL PHTC-A-7005-6191
FOR THE EXTRACTION OF DNA AND PROTEIN IN GHOSTS FROM BACTER BNBC-A-0622-1304
OF THE REPLICATE FORM DNA AT VARIOUS STAGES OF INFECTION JMFB-A-3C14-5348
RATION OF ADENINE FROM DNA BY HYDROGEN PEROXIDE.. EFF NATU-A-0220-0951
STUDY OF THE DNA CONTENT IN CELL NUCLEI OF JNIH-A-0620-5660
FORMATION. NUCLEUS AND DNA CONTENT IN THE BOY PARENCHYMA NMCS-A-0611-6196
LEUM ERECTUM.• EFFECT• DNA CONTENT OF A CHROMOSOME OF TRI SCIE-A-0141-0215
UPCHIN • METHYLATION OF DNA DURING DEVELOPMENT OF THE SEA JMCA-A-0614-0691
DNA AND CYTOPLASMIC DNA FROM TISSUES OF HIGHER PLANTS. JCLN-A-0627-0451
AND ACTIVITY OF LAMNDA DNA IN A SUPER INFECTED IMMUNE JMCA-A-3C14-0199
MOLECULAR WEIGHT OF THE DNA IN THE CHROMOSOMES OF ESCHERIC PNAS-A-0064-1616
CCHARIDE INHIBITOR OF A DNA METHYL TRANSFERASE.• • POLY SA PNAS-A-0004-1711
Y OF DIFFERENT PERIODIC DNA MODELS.. • OF THE CONDUCTIVIT JCPL-A-0644-5001
BIOLOGICAL ACTIVITY OF DNA PREPARATIONS ISOLATED FROM MZMA-A-27-109-071
A.• ITS RELATION TO THE DNA REPLICATION CYCLE...OF BACTERI PHCH-A-0635-7001
THYMINE•NON-CONSERVATIVE DNA REPLICATION IN BACTERIA AFTER PNAS-A-0614-1228
S TUMOR•DURATION OF THE DNA SYNTHESIS PHASE IN HELA ASCITES NATU-A-0633-0621B
MATION.• INVOLVEMENT OF DNA SYNTHESIS.... SUBTILES TRANSFOR JMBB-A-0614-0414
PRESSURE EFFECT ON DNA TRANSITION.. NMAC-A-0112-0179
TUDIES ON BACTERIOPHAGE DNA. RENATURATION OF TEAS DNA.... IMCH-A-0601-0041
HOT PHENOL IN PREPARING DNA.• USE OF PNAS-A-0004-1641
ENDING OF SILVER ION BY DNA.• • STUDIES OF THE • BIPM-A-0604-0017
CTURE AND PROPERTIES OF DNA.• MACRO MOLECULAR STRU GUBE-A-0019-0369
ATOMS WITH THYMINE AND DNA.• REACTION OF HYDROGEN PNAS-A-0004-1488
ULTRAVIOLET IRRADIATED DNA.• ENZYMIC DEGRADATION OF PHCH-A-0005-0119
RAT LIVER MITOCHONDRIAL DNA.• • AND SOME PROPERTIES OF PNAS-A-0004-1459
INE NUCLEOSIDE OF PBS 2 DNA.• • OF GLUCOSE IN THE CYTO BBMC-A-0022-0141
O SYNTHESES OF CELLULAR DNA.• • OF POLYOMA VIRUS INDUCE PNAS-A-0004-1344
O POLYOMA AND PAPILLOMA DNA.• BINDING OF RNA POLYMERASE T JMBR-A-0014-0491
• RENATURATION OF TEAS DNA...STUDIES ON BACTERIOPHAGE DNA IMCH-A-0003-0041
OF IN VITRO GENETIC • DNA-RNA COMPLEX AS AN INTERMEDIATE PNAS-A-0004-1734
OF NUCLEAR PROTEINS AND DNA/S IN FIBROBLASTS GROWN IN CMTR-A-0010-0101
OF THYMIDINE INTO THE DNA/S IN MITOCHONDRIA.• AIPP-A-0644-0254
SIDES, NUCLEOTIDES, AND DNA/S.• • OF CORRELATED TO NUCLE. BICH-A-0004-0244
RIBOSINE NUCLEOTIDES IN DNA/S.•• OF THE DISTRIBUTION OF PY NATU-A-0204-0244
INITY LABELING OF ANTI- DNP ANTIBODIES.• • OF AFF IMCH-A-0001-0051
NES FROM OCTA SILANE TO DODECA SILANE.• • LINEAR POLY SILA JORC-A-0005-0120
RYLATION OF HEPTANE AND DODECANE.• • OF CHLORO PHOSPHO FRAN-A-0018-2804
HAVIOR OF THE DI METHYL DODECYL AMINE OXIDE-WATER SYSTEM.. JAOC-A-0041-0028
OF PYRIDINE WITH DODECYL BROMIDE IN HYDROXYLIC AGKZ-A-0068-2051
ND • EFFECTS OF SODIUM DODECYL SULFATE ON THE ADSORBING A AKRZ-A-0068-2042
THYLENE BLUE AND SODIUM DODECYL SULFATE.• • BETWEEN MI AKRZ-A-0068-2128
MERIC SODIUM P-CETMIA-N- DODECYLBENZENE SULFONATES.• • END JAOC-A-0042-1044
HOSPHO DI ESTERASE FROM DOG HEART.• • NUCLEOCIDE P BICH-A-0035-0150
EFFECT OF MANGANESE ON DOG MYOCARDIUM.• • INOTROPIC AJPH-A-0210-0557
C UREA SYNTHESIS IN THE DOG.• EXTRA HEPATI BEJO-A-0092-0198
I AMINE TOXICITY IN THI DOG.• • OF AGGREGATION ON AMPHE AIPT-A-0139-0196
OXIC ACETIC ACID IN THE DOG.• • HANDLING OF 5-HYDROXY IN PSFB-A-0120-0250

"KWIC" INDEX (Key Word in Context), a computer-produced concordance: significant words in titles of scientific papers appear alphabetically with complete title reference in code. *Chemical Titles* (Chemical Abstracts Service).



Bellerophon, mounted on Pegasus, slaying the Chimera. Terracotta relief from island of Melos. (The British Museum).

orientation is to the future, to prediction and to control. John Dewey precisely formulates a modern preoccupation in defining intelligence as the "prospective control of the environment," and it is a melancholy feature of modern progress that we have recently become able to discern with the help of the elaborate predictive apparatus of modernity that human beings are running out of time. To illustrate some of the paradoxes, it is possible to contrast the three millenia of the Egyptian empire, in which the primary sign was always the conservative icon, with the two centuries of dominance of the symbol in the American empire, in which the theme has always been change and progress.

Implications of Iconography

The apparent ease with which Peirce separated the categories is seen as an illusion when we begin to work with these ideas. In iconographic context, it may be of some interest to examine a particular combination of icons. Saint Mark, the patron saint of Venice, is portrayed in association with a lion. Obviously, some person or group of persons made this link; thereafter the link has been repetitively ratified by consensus in tradition. Did Saint Mark *choose* his lion? The question is difficult to answer; it is easier to see that the attribution *was chosen* and remains in its arbitrary and artificial status.

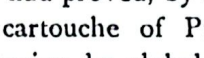
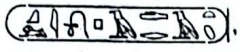
The combination of saint and animal, two iconic representations, comes to have a particular mutual significance in iconographic context; thus two icons constitute one symbol. In this artistic context we see the ease of combinatorial processing, and we can contrast it specifically with the absolute impossibility of creating a combined animal in biological context. My particular interest lies in the modern possibility of organ transplant as an emergent comprehensively new technology which now appears as the forerunner of genetic combinations which have startling commercial possibilities.

The possibility of combining animal bodies into a single composite has long been a human characteristic. In ancient Egypt the characteristic form of deities is that of a human body combined with an animal head. This combination is similar in semiotic principle to the Saint Mark-lion symbol; the god Horus, a central figure in the long-enduring religious life of Egypt, was presented as having a man's body with the head of a falcon. Again the combination of two iconic forms creates a symbol.

In ancient Greek mythology, we find the sources of the modern name applied to Horus and all other such combinations into a single symbol. The name is Chimera, and its original source is the proper name applied to a mythological monster who was part lion, part goat, and part serpent. This terrifying beast was conquered and destroyed by the hero Bellerophon assisted by his winged horse Pegasus. As a combination of horse and bird, Pegasus qualifies for the modern category of chimera as a common noun. Obviously, the combination of parts into a composite whole has the purpose of creating a new organism with greater powers than either (or any) part. The principle finds exemplification in the modern conglomerate, of which the parts are often more disparate than lion, goat and serpent; in my own recent experience the merging of two hospitals has produced a modern chimera the destiny and function of which are still obscure.

My point in pursuing this perhaps bizarre train of thought is a simple one: it is to indicate how much modern realizations in the many different fields of modern enterprise show ancient patterns of transformation. The modern series of achievements is specifically iconoclastic in showing the possibility of new creations having anti-biological characteristics. In modern immunology, a principal concern is that the chimeras created by organ transplant immediately become the focus of bitter internal conflict between the previously separate identities. The idealization of modernity, especially in the United States, is that of the merging and melding of separate ethnic identities in what used to be called a "melting pot." But what we find, instead, all over the world, is a modern affirmation of ancient ethnic antagonisms. The contrast is that existing between the human imagination and traditional cultural characteristics. Again, a principal development of interest is that in which the long duration of an intensely ethnic civilization in Egypt contrasts with the severe strains in an intensely modern empire dedicated to combinations of unprecedented extent.

Still in the same icon-symbol context of transformation, it is possible to see a salient event in cultural evolution by looking briefly at the deciphering of hieroglyphic writing in an astonishingly insightful illumination on the part of a young French scholar Champollion. The basic hypothesis was that the three inscriptions on the Rosetta stone must all present the

Åkerblad had read the demotic name of Ptolemy alphabetically, and Champollion, though always inclined to hark back to his incompatible theory of the purely symbolic character of the hieroglyphs, had proved, by his identification of the demotic signs with those contained in the cartouche of Ptolemy , that the hieroglyphs also could, at least on occasion, be alphabetic. The values attached by him to the individual hieroglyphs were now confirmed by the cartouche of Cleopatra , for in both cartouches the signs for *p*, for *o*[1] and for *l*, were found standing in exactly the positions where they were to be expected. The sign for *t* in 'Ptolemaios' differed, indeed, from the sign  which represented *t* in 'Cleopatra', but the discrepancy could be easily explained by the principle of homophony (the representation of the same sound by different signs), of which Champollion was well aware. For the rest, the two cartouches provided him with a number of other equivalences which could not fail to assist him in his search for further identifications. These the following months brought in unexpected abundance; among the cartouches successively transliterated and identified were those of Alexander, Berenice, Tiberius, Domitian, and Trajan, besides others containing such imperial titles as *Autocrator*, *Caesar*, and *Sebastos*.

from *Egyptian Grammar*, Sir Alan Gardner (Oxford University Press, 1957).

same text. Working on this hypothesis a prior scholar had found that the cartouches in the hieroglyphic inscription correspond to the names of the Pharaohs Ptolemy and Cleopatra. Champollion's sudden insight was that the iconic forms of the hieroglyphics had evolved to the point of having phonetic meaning. In both names, the apparently iconic sign representing the *lion* has the meaning of an instruction to pronounce the letter *L*, occurring in both names. The subsequent history of symbolic formulation shows the emergence later of a purely arbitrary sign (different in different language systems) for this phoneme. Cultural evolution uses the icon but moves away from it as human beings become able to cope intellectually with the progressive forms of abstraction.

Now jumping to the context of modern psychiatry, it has long been apparent (in an insight that is still far from adequately developed) that thinking in symbols (especially using words and mathematical signs) is more *abstract* than is thinking in terms of images in their typical *concrete* (and on the surface at least, intuitively obvious meanings). In the verbal universe the same difference occurs. Human beings who think more concretely tend to think preponderantly in metaphor, and a metaphor, like an icon, has its meaning through similarity. As human beings become more sophisticated, the proportion of *metonyms* increases. Various studies have shown that the young, the preliterate, the lower class, and the schizophrenic all show a strong preponderance of metaphorical and imaginal thinking.

Freud's basic work describes dream-interpretation (metaphorically) as the "Royal Road to the Unconscious." In dream interpretation, one begins with a particular image and proceeds by describing that image first literally, as we say, then associating to it various symbolic references which then "give it its meaning." An ancient and glib dream interpretation was reported in relation to Alexander the Great who dreamed of a satyr, the man-goat beast known for its sexual enthusiasm. But the significant interpretation of the dream had to do with changing the icon into a symbol and analyzing the term used. When "Satyr" becomes "Sa Tyros," it means "Tyre is thine" and correctly predicts the victory in the ensuing battle. The transformation is direct and specific: the picture is, as Freud emphasized, a rebus which gives correct information when appropriately interpreted.

Freud's work with dream interpretation and with the elucidation of the symbolism of psychiatric disorders began now about a hundred years ago, the epoch in which modern art was first beginning to be influential. Both psychoanalysis and modern art were highly unpopular when first introduced; both have shown the typical modern pattern of the growth industry since then. Growth in industry, in science, in art, and in psychoanalysis has been concentrated in a relatively small part of a limited area of the human universe. Specifically, all these have flourished in relatively upper social classes in developed countries of the West; all have been most dramatically evident in the United States, and it is an indication of the velocity of change that the center of development has now moved to Japan and Germany, in only a decade or two.

Let me introduce another person or personage into this discussion to quote from him a crucial insight couched in a typically iconic mode and elucidated by him in another persona. In response to a call for artifacts in a show to be assembled, Marcel Duchamp submitted, under the title *Fountain*, a common plumber's urinal of the kind found in men's rooms. In this name he inverted the function of the humble receptacle in what might be called an apotheosis of the urinal. Duchamp used the pseudonym R. Mutt to identify the artist. The Fountain was rejected, and Duchamp thereafter wrote an explanatory exegesis of its origin, using a different pseudonym. The critic offered the opinion that while it is true that Mr. Mutt did not make or create the artifact in any concrete sense, he performed a specifically creative act in *choosing* it.

If we now take Duchamp's thesis back into the semiotic context, it is apparent that he made an astonishingly perceptive statement that stands as the slogan most significant in modern art and perhaps throughout modernity. This theory is that the creative act is *associative* as much as it or even more than it is *formative*. By placing a urinal in a different context Duchamp created a new artifact. The parallel to the word in context is obvious. In a discussion of the method of evolution, the molecular biologist, Jacques Monod, has described the process as one of "tinkering:" the French word (used by Lévi-Strauss to describe the mental operations of the "savage") is *bricolage*. Monod writes that natural selection works "like a tinkerer...who does not know what he is going to produce but uses...everything at his disposal to produce some kind of workable object."

Duchamp's tinkering is polymorphic. He reverses the func-

tion of the urinal-receptacle into that of a fountain-pouring out. He uses a pseudonym to identify the artist, thus illustrating the ancient privilege of the writer—but then takes the process a step further by acting as his own critic-exegeticist in explaining the deep structural meaning of his own "work of art." The principle of choice is illustrated time after time, and the claiming of a new identity at his own whim is carried to an absurd extreme. In a specific relation to the problem of identity in modern psychotherapy, Erik Erikson, a major theorist of identity, gave himself his own name, thus not only claiming the privilege of the artist but that of the parent and in effect identifying himself as his own father.

Duchamp's method shows the sophistication of one insightful into the use of language to define and describe: he tinkers not by joining concrete components but by associating a word with an unfamiliar referent. Duchamp's principle becomes more familiar when we compare it with the immortal statement of Humpty Dumpty that "A word means precisely what I want it to mean." The principle of choice and association emerges again—and if we turn to psychoanalytic ways of thinking, it is apparent that many interpretations rest upon the contiguity of ideas sequentially stated. In one perhaps appropriately excretory context, a patient once noted after being kept waiting that he had always been proud of his ability to hold his water, then he associated to the little Dutch boy with a finger in the dike, and finally remembered that he had become afraid of his own aggression in childhood when he imagined that having urinated on another little boy might kill him. The appropriate interpretation seemed to be that, in spite of his having denied being angry, the associations indicate that he was *pissed off*.

Duchamp's modern style is shown not only by the Fountain and the many other found objects which he converted into artifacts by fiat, but also in the manner in which at an early age he quit working as an artist and passed his time playing chess—perhaps while waiting for the world to catch up with him. In words eventually popularized in the 1960's, he was doing his own thing, *choosing* his activity and transcending the compulsiveness of a definition of an artist. In these many different contexts, Duchamp illustrates the central importance of choice and association in modern art. When we ask "What does it mean?" the semiotic answer is clear: the process is a further development of the transformation of principal sign from icon to symbol, and the principal trope from metaphor to metonym.

Returning once more to Egypt, it is possible to cite the extraordinary life of the Pharaoh Ikhnaten. This dreamer, given the absolute power of the imperial monarch, chose, not only for himself but for his entire nation, to change the definition of God. Ikhnaten replaced Amon and his many associated gods by a single abstract deity emanating from the sun (as source of all earthly energy, a fact now increasingly important in the Middle East) under the name Aten. In his discussion of Moses and monotheism, Freud hypothesizes that Moses was in fact an Egyptian prince who adopted (i.e., chose) the Israelites as a vehicle for the preservation of the ideal of monotheism. It is an indication of the advantages and the limitations of absolute monarch that Ikhaten was able during his lifetime to impose the choice of Aten over Amon, but the history of his brief life (and perhaps accelerated death) shows how transient was such an imposition. His close successor is known to us as Tutankhamon; the name Amon has reappeared as the priests quickly chose to reassert their traditions and recreate the pantheon of gods displaced by the



Akhenaten (Ikhnaten) presents offering to Aten, represented by sun disc. The pharoah tried to destroy the power of the Theban priests of Amun and founded a new capital. Cairo, 1580-1530 B.C. (18th Dynasty).



Isis, with head of a lioness, divine mother, wife of Osiris, mother of Horus, popular goddess throughout Egypt; in later times had priests, temples, festivals throughout Roman Empire. from Relief on temple at Kom Ombo.

posthumously heretic pharaoh. As in the concrete chimera represented as: man + beast = God, the names of the pharaohs present abstract chimeras.

What is most astonishing about Egypt in its glory was its durability; the empire lasted three thousand years during much of which time relatively little change occured in the language, the religion, and so on. As a feature of religious *iconology* in the Egyptian mode, we find again the principle of association. Horus was the principal figure in a long myth of incest, fratricide, heroism, and resurrection with, as noted, the body of a man and the head of a falcon. The goddess Hathor has the head of a cow; others have those of the ibis, the rhinocerus, the crocodile. In this bizarre group of deities, all, apparently iconic in their imaginal characteristics, are more significantly symbols because of the meaning of the association. Peculiarly, and with special reference to the rediscovery of such creatures in modern immunology, it is worth looking at the names applied.

Two part-icons (human body, animal head, with the structural opposite in the Sphinx of a human head and animal body) constitute a primary artifact selected and affirmed by Egyptians for three millenia—considerably longer than the Christian era. By adding two icons one creates a symbol, one necessarily ratified by consensus and continuously subject to choice; Ikhaten misjudged the power of consensus in the people who, even though unable to oppose him in his lifetime, yet reverted quickly to the former gods when he died.

In the modern context, what is most dramatic is the demonstration, many times repeated, that biological organisms are resolutely anti-chimerical. The animal body has an unerring capacity to differentiate its biological selfhood by rejecting and sloughing off any portion of an alien body incorporated within its "territory." Ancient civilizations already show the anti-biological implications of the human condition. Human beings have always created what is not only illegitimate but impossible in the biological context.

In man's progress through five thousand years, it is possible to say that the change can be summarized as a continuous move from the icon to the symbol, from the given to the chosen, from the image to the description, from the concrete to the abstract.

Throughout the gradual progression of change (the modern tendency to regard change as beneficial now appears more and more problematic, thus endangering one meaning of the term "progressive") the process of destroying icons has been termed *iconoclasm*. The term has been generalized to mean something like "radical" (which itself has the implication of "rooting out" or eliminating "root and branch"). My particular preoccupation has been with the deep structural implications of this change.

Most remarkable through this period has been the repetitive appearance of the basic pattern of the dialectic; in all of those contexts in which iconoclastic revolution appears and leads to new social movements, the subsequent course is "regressive" in that the revolution generates institutions that, depending as all human movements do upon stability over time, create that stability through establishing new orthodoxies. In metaphorical terms again, the revolution ceases when its result is a set of new icons in a renewed orthodoxy. Many commentators have noted, for example, that the Russian revolution has evolved into a totalitarian state bearing a very close resemblance to the autocratic regimes of the Tsars. In the intellectual sphere, a similar kind of "return of the repressed" is to be found in the orthodoxies of modern philosophy and



The opposite of totemism: *Naturalized Man*, sketch by Le Brun.

even in the positivist versions of science.

My own interests have long been focused upon the peculiarly modern invention of an immaterial technology designed to re-program human behavior through highly controlled conversation—the techniques generically called "psychotherapy." This method as a formal medical intervention was created, in an effort his followers describe as a unique achievement, by Sigmund Freud. Conceived as a "cure," the later course of psychoanalysis is interesting in that Freud himself became more and more antimedical; in addition, early and later, he described the method as educational. Paradoxically, although Freud emphasized throughout the iconoclastic character of psychoanalytic thinking and especially attacked religion as an "illusion," the institutional structure of psychoanalysis has always demonstrated the characteristics of a religious movement. Of particular note is the passionate belief maintained by the "faithful" with the rejection of rebels who often thereafter have created their own sectarian variants each with a similarly passionate belief system.

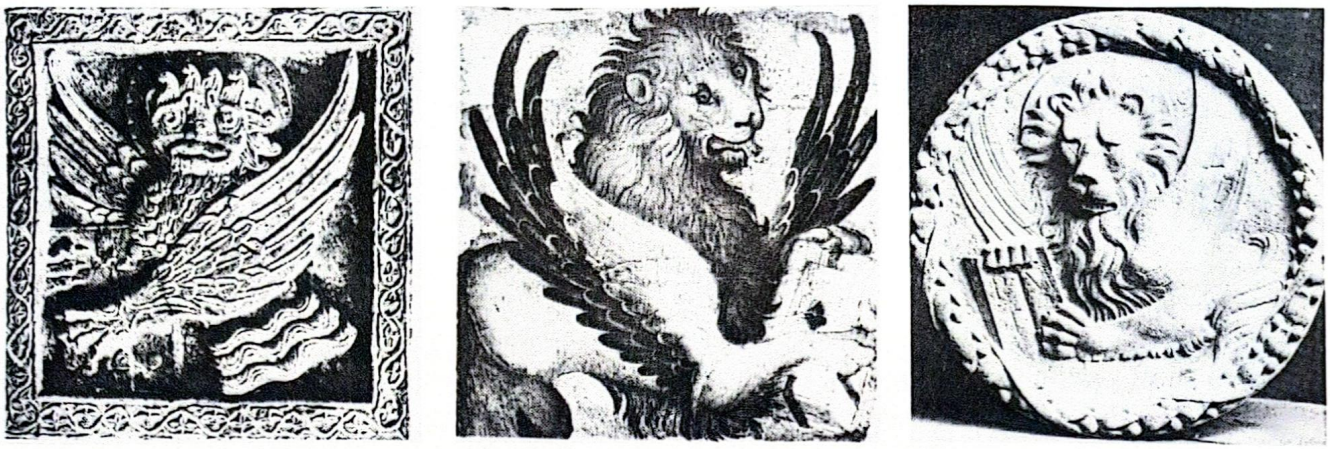
It is of interest that several Jewish scholars have traced the basic ideas of psychoanalysis to the tradition of Jewish mysticism and called attention to the tradition of passionate membership in the Hassidic sect from which Freud's ancestors came. In the larger context, the emergence of both Christianity and Islam as "Jewish heresies" is apparent in the sacred books of the two great religions. The astonishingly creative implications of the Hebraic traditions is often obscured by Jewish sensitivity to any kind of comment made by "outsiders" (again a striking characteristic of religious institutionalization). A recent comment by George Steiner emphasizes the foundation of psychoanalysis in the method of interpretation, a characteristic that establishes the larger category of hermeneutics. Parenthetically, the dictionary definition of hermeneutics as the "art *or* science" of interpretation clearly by-passes the often argued question of whether psychoanalysis is an art or a science. In the modern mode, the answer is obviously identical to the principle of complementarity: whether art or science depends upon the investigative instruments used in examining the discipline.

The creation of an orthodoxy leads directly on to the emergence of protestants in the basic pattern of the dialectic, thesis and antithesis. The process of reformulation in psychoanalysis continuously changes the character of the field. Again we find the peculiar emergence of revolutionary re-statement which supports the formation of revolutionary sects. An example of particular interest is that of Jacques Lacan, whose creative imagination has led him now to create internal revolutions on three successive occasions in which he has led the opposition to himself—more dramatically but similar in meaning to the anti-Wittgenstein movement led by Wittgenstein (in *Philosophical Investigations vs. Tractatus)*. Peculiarly again, Lacan's radical shifts in party line have occurred in France, a country long noted for the fractionation of the electorate into small opposing parties. The significant patterning appearing time and again is that of the "unconscious" structuring of all social movements by their contexts of national and ethnic origin.

Freud's early comment that psychoanalysis is best applied to the "most valuable members of society" (interesting especially in its having been patterned on the model of Freud's own introspective self-discovery has been systematically demonstrated by Henry and his associates to mean that psychoanalysis and related psychotherapeutic professions involve the longest and most intensive formal education of any modern specialization. The close and highly meaningful correlation is that these professions allow a remarkably rapid upward social mobility, at least in the United States. The demonstration is that of a socio-economic "cure" of dramatic proportions—although the extent and the durability of the medical cure remains ambiguous even to this day.

Jerome Bruner, in many studies of the educational process over many years, emphasizes that the generic result of education is to promote *context-independence,* that is, an independence from any concrete context because of the intervention of a sophisticated technology of signs allowing "virtual" acquaintance with the remote, the ancient, and the alien. The predominant theme is that of a *distancing* of referring sign from that to which the sign refers. We encounter again the distinction between icon and symbol: the school uses a great variety of both in, respectively, photographs (and other simulacra) and verbal-mathematic symbols.

The trend throughout intensive education is toward the symbol and away from the icon. Alice is made to say by her creator, a mathematician, "What use are books without pic-



Lions of St. Mark: variations from 13th to 15th centuries, the most common political and religious symbol of Venice.

tures?", and the mathematician showed his own ambivalence and inhibition by pursuing the occupation of taking photographs of little girls, preferably naked, when he was not occupying himself with mathematical symbolization. The conflict can be put, in a somewhat artificial way, as that of icon vs. symbol in the life of Lewis Carroll vs. Charles Dodgson (Jekyll and Hyde?). Another example of the principle of complementarity.

Notable in this progressive movement from the icon to the symbol, with its verbal correlate in the movement from the metaphor toward the metonym, is that Bruner's context-independence is applicable only if one ignores the context of semiotic method. The more independent of concrete context an educated human being becomes the more dependent he is upon the symbolic context. Effective methods of by-passing natural sources of information have been developed in teaching techniques related to blind infants especially. These show that the data-processing machinery in the brain has evolved so as to be to a considerable extent independent of direct visual input, although the evolutionary evidence indicates that the human advantage is clearly that implicit in the overgrowth of the visual cortex in the evolution of *Homo sapiens*. But the fact that the cortex is a form of a computer with the possibility of a myriad of inputs from sources other than the eyes is obvious.

The historical-evolutionary process is one in which the "natural" method is that of using icons ("a picture is worth a thousand words") to program the cerebral computer; after attaining a certain degree of sophistication in that programming process, however, it becomes possible to by-pass the pictorial via the use of symbolic description. The whole course of science can be described as that of the replacement of the use of similarity by the use of more remote kinds of signification dependent upon contiguous relatedness.

The human condition as a whole is dependent upon the species-specific human attribute of language. Although we say "natural language" and assume that the methods we use to speak and think are "natural," it is easy to demonstrate that all speech is artificial and must be learned. Thus all language—and all intelligence in the specific sense of that term—is necessarily artificial. The emergence of "artificial intelligence" in our time in the computer is more properly the emergence of artificial intelligence. The predominant sign used is the metonym, replacing the metaphor; since both are verbal, both are symbols, but the metaphor is an *iconic symbol,* the metonym a *symbolic symbol.*

The importance of these trends is most clearly seen in psychoanalysis in a demonstration that seems to have avoided Freud's own understanding. In the report of the Signorelli incident, Freud makes the clear comment that the painter's identity "became unconscious" when he could not remember the painter's name—even though when he thought of the paintings to which he made reference he "saw" in what we metaphorically call the "mind's eye," the self-portrait of the painter. When Freud recovered the painter's name, he says that he resolved the repression through analysis. A simpler description would be that he was again able to associate the painter's face (in iconic representation) with the painter's name (in symbolic representation). The important fact is that the painter's face is a "natural" part of him, while all names are arbitrary and "unnatural." Thus what Freud describes as "making the unconscious conscious" can much more easily be described as associating a symbolic symbol with an icon. Returning to comments made above, it is obvious that image + name = conscious representation, while image + name constitutes an *abstract chimera.*

Echoing the repetitive phrase of Ogden and Richards, the meaning of the meanings reviewed above is that cultural evolution uses natural biological implications yet moves progressively and in an accelerating way from the conservatism and almost infinitesimally slow process of change-and-stabilization to a process of almost infinitely accelerated change. Biological evolution shows as its most characteristic attribute a striking conservatism, while cultural evolution shows the opposite. It is only in the present century, however, that progressive elaboration of the underlying unconscious meaning of verbal technology has allowed human beings to become not only self-conscious with reference to the deep structures of psychological processing but even more dramatically (though almost incomprehensibly) aware of the shaping of the self by its own instruments. We are made by what we make, we are constructed by our own methods, we are selves generated through self-description.

Clayton Eshelman

THE LANGUAGE ORPHAN

the I,
barque docked at the doorstep of no one.
In it, an infant ages, unnursed,
at last, elderly, crawls over the side,
down the cobblestone, in its weather-
stained Sweet Pea regalia...

Who is watching I crawl
from a high up window, Who
is the window, behind which
I's parent is no one—

again, no one and no one,
and no one, until, as if the air
were to become scarred,
a community of the living dead appears.
It is they who fashion barque dock
doorstep and cobblestone,
yet it is we
who fondle the emptying Sweet Pea regalia,
its sand pass through
our glass fingers, we,
its marionettes,
the needle-folk, test-tubes for

whose spit? Whose heels? The goose-stepping
passing through this now
very ancient I as if I were not
the substantive lost, the pineal,
the monkey-shriveled pine-cone radar.

Kino mita hito boku no tomodachi desu
Last night seen man my friend is

My friend last night is seen
my man
last seen is my friend?

Last friend my man
is night seen
night scene: my last man e
lastic friend

The asp coiling in Clio's arms is
is on her arms
is in her arms
is under her
kino mita hito boku no tomodachi desu

The asp elastic night
The coiling Clio friend
In the arms of my last night friend,
man, Clio's asp, the coiling is.

Is, coiling, between purchase
and storage, rope on which I
tugs its never-ending wagon on which
the King, the O, the
absolutely empty space dictator is clapping.

In the bra of language
the coiling is, the worm in oink,
the opaque thingamajig in sound,
black spot out of which
chemical worm out of a tablet
to which I
sets fire,

the rubbing is all
piercing nothing,
inseminating pitch,
the fire the friction the Pittosporum

July, 1980

THEY

are under Is,
under-eyes,
cells in which jaguars are dancing

Up here, it is only I I I—no they,
and so the Is huddle, romantically
clasping heads and toes to shape
a wall-like number
What do the Is enwall?
A toro stab enclosure?
What does the rock of their copulating bodies reflect?
How in their obsidian does the moon look?
Are there enough questions?

The action below I,
thermal, ophidian,
makes the dream-ground
and makes it creak profile of an oldest god,
the bearded dragon out of whose maw
the they-laden sphincter-spectre is always
brownly emerging, disappearing
water-logged tomb before this
margin, language is what is left
this effaced page, to the right
you can make out the rabbit-ears
of the ghost of a tree, something
is being sacrificed to the left
I write this, as if I were not attached
an Xibalba of they and the error
is to conceive they as existing in the overworld

They is the underworld,
lords of the locker
in which the conches of adverbs still
have their tails, their lily-
strings, their lys, they float
they-massive, the verb worms are issuing
the jaguar spots of nouns, nouns
are heroes and twins, the verbs drool
as the slimey stoppings-of-the-action emerge,
this drool looks like hair,
so the Is a dream feel bearded dragon,
feel god out of
what basement of reptile stomach

If blindfolded the reptile verb will issue
like a spot of alchemical excrement
something the tongue immediately takes up

Out there, the Is have spotted an animal
larger than the earth, it is an M,
an M that is owning and
being covered with snow while it is snowing

It is excreting snow, black snow,
snow so impersonal the word sounds like "Snow"
as if a serpent had attached itself to No
and W were a double vase out of which fireflies were
springing
and so the Is cry to this M-shaped weather
a soundless cry, mouths stretched wide
and it is the power of M that enters their
descends through to the dream-ground
nourishment for
tendrils lined with excrement
so that the cells in which jaguars are dancing
remain green, an excresence, vast canneries
for the bubbling peristalsis
I stand son, never still
so that a white sound surrounds language
in which M is present

Think of I as a vase
with cracked bottom, of the animal M
sprung from its distance as a raindrop
into the vase—I opening, vaseline
leaking, as I as vassal to
that kingdom where boa-constriction is tense,
all tenses, flambeed over water,
the raft of Quetzalcoatl from which billow
jungle vines with Christian compassion,
fumes in which leeches are coiling
fraternally with their language trials,
an advizandum in which all the I-evidence
assembled, is shredded, biliferously devoured.

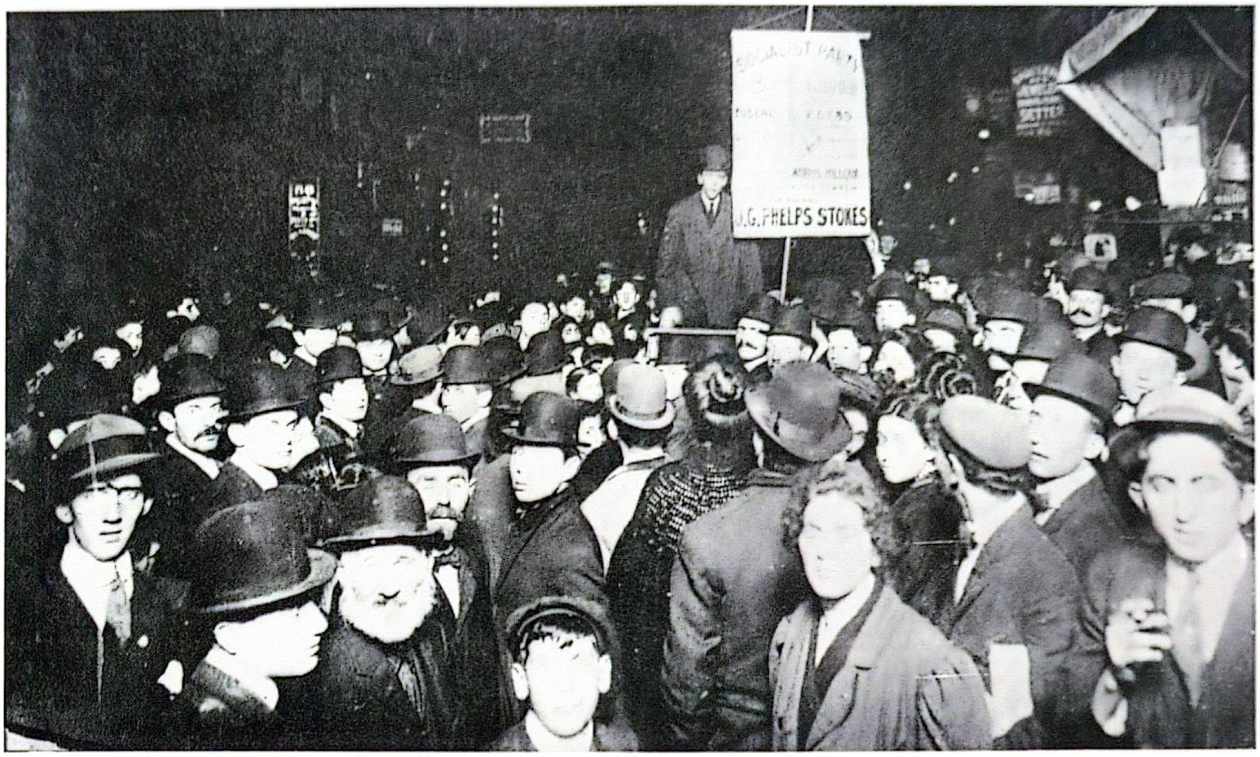
for Michael Davidson

THE ARCADE'S DISCOURSE ON METHOD

Sensibility is a lowlands, wet, marshy,
not much vertical happens there
except for a Doric column about which firemen are
turning smooth into screw rivers, whoopie lanes,
down and around we go,
found and amound we go, its that old
black elastic, the tide, that which is under-slung,
or is my sensibility my cycloptic tower?
Come on now, is all I am that which is teetering
impacted with gum and Jersusalem over
this muddy flat in which my true humanos is said to be
inhumanimated, logos humanos, the smoke
between Paul Blackburn's fingers, *ashura,* the repressed,
fumes from all the whoevers and what a valley of
the dead life, then, would be if, but as if
is starting to look suspiciously black holish—
how about the way I really am? Is that
my sensibility? Deep-fried lobster that still
retains a glorieta of the shark-encircled sea?
"The problem with you," the Arcade lit up,
"is that you are still trying to make sense out of
the fact that the absurd can be pried apart,
like a dismal soap-opera, its frets are surely
as coherent as the high-school musical you perform in
—but these days, in North America,
poetic action is either blinks and lights
or the seemingly eternal mattress of SOS to
the metric father—your error is to believe that
if you balanced your own life with and
against the ammunition scraps of a contemporeity
outside your life that visionaries in hiding for eons
would emerge through the tree-ringed
linguistic knots and make not only your own life worse
but confuse everyone to the point
that the so-called 2000 Eternals to be forged
before the 21st Century would be forgotten, or
their lock-combinations would be, and the polyps
now clearly embedded with an all-overwhelming sadness
would not achieve the apocalypse that everything human
would seem to lead up to,"

or so the Arcade,
in the Westwood corner, indicated, lovely bubble-gum
for approximately 20 seconds, the cheek
memorizing brail of a sphincter
whose elasticity could cheer
Red Ryder Red Ryder Send Dante Over
as its saviour was slit—

alas, the gush forward
onto the frail seppuku platform is web-dressing and
bios for the massive laying-on of hands half-
smothering the ache all this metaphoric
incision was to peel, the fruit of the gonad, the goal
of all golf-courses whose enemy is closure.



Campaigning on the Socialist ticket, Lower East Side, Eldridge Street, Fall 1908. Museum of the City of New York.



Backstage at production of *Brothers Ashkenazi* by I.J. Singer, showing among others, Gerta Rosen, Mayor LaGuardia (behind Anna Teitlebaum), Albert Einstein and Maurice Schwartz. Museum of the City of New York.

Miguel Algarin

from *BODY BEE CALLING*

Rome: Stanta Maria in Trastevere

Rome I see you again,
Santa Maria!
No Nuke Sperm Here,
can't afford 25,000 years
of cellular radioactivity
Santa Maria in Trastevere
plaza where eyes rove
till mutual contact
explodes the raw uranium
of flesh on flesh risk
after love and dangerous deposits
there's falling hair,
rotting teeth and marrow cancer,
after love our lips
develop sores and drip nuclear pus,
Santa Maria!
running off to Casa Blanca
for transexual liquidation of Hermaphrodite,
muse inspired in both sexes,
Keats died looking out a window,
Shelley helped him storm
the citadel of heaven,
he spitting rancid blood
as Shelley telegrammed the angels
to prepare heaven's jubilation
at his coming and conversion
to spirit matter,
flashing eight to thirteen flicks
per second
inner world matter
Keats perceiving through feverish
hallucinations,
through blood
spat up to accomodate oxygen,
Rome I see you again,
I
see
you again
I
breathe
you again
I
feel your hieroglyphics give way
up stream to my insistent paddle,
coming to perceive,
to inhale
sleep and poetry
as the day goes perilously on its way,
up stream against the planetary round
the earth makes every twenty four hours;
"IN THIS ROOM
ON THE 23rd of FEBRUARY 1821
DIED
JOHN KEATS"
and now wanting my dreams
draws me to a dream machine
where I'll yield two hundred years
of dreams not had to Rome,
of dreams fueled out of her gravity,
out of her present air pressure
where I'm helped up to God's window
to cut with Brian's flickering machine
God's barbed wire fence around my brain,
a fence Brian would tear with flickers,
if he could,
paura,
A NUCLEAR FLICKERING GOD,
25,000 years of mutations,
APOCALYPSE,
"Hitler knew," says Brian,
"that's why he paid for Von Braun's space travel,"
deporting to new oxygen grounds
nightmare robots he called "gifted man,"
a nuclear waste deposit fueled MAN,
pumping plutonium blood,
circulating mutations,
producing alien textures,
Rome, Roma, I,
see you again
through alpha waves eight to thirteen
flicks per second in Rome,
love gotten, not gotten,
not to get more oxygen, fly,
board space age oil refinery at Ostia
commandered by a Burrough's computer
instructed to destroy crew
in favor of new worlds
in which to breed,
in which to sow
new grounds for perpetuating
earthly images of ourselves,
mutated space age man
bent on speaking to the whole,
not a part, but the whole assemblage
at Il Premiere Festival dei Poeti at Ostia.

Materialization of IRT Local

86th St. downtown local, asleep to details,
awakened by two men struggling, rolling into tracks,
leaping at each other, mountain bobcats climbing,
on each other's back, belting, swinging,
hurting, tussling over the tracks,
bleeding, electricity, approaching train,
people on platform screaming,
"police, police, police,"
the cities of the red night
bleed bright brash blood
locked in-combat-to-death,
"you tried to push me into the tracks,"
people screaming "get out of the tracks,
you fools the train is coming,
police, police, police,"
man drops umbrella and newspaper and jumps into tracks,
grabs on bobcats ear, another commuter
swings his umbrella hitting at the other
bobcat, another two men jump in,
more people screaming, the crowd angers,
beware of shoving people, ramming others
into tracks, lawlessness, vigilante
mob rule, civil arrests, unresting fear,
righteous cannibalism, denouncing,
pointing fingers!
Shuttle to East Side,
Shuttle to Space,
No. 5 Local roars in,
doors are swallowed open,
board train, cross moving car,
look through closed door window
to see two men restrained by police,
making charges, threats, waiting,
it is 8:05 P.M., they are being arrested,
how long will it take for Radio/T.V.
News Programmers to pipe it
into the air waves as we fly by wire?[1]

1) Note on dematerializing to leave Earth: the mood is total abandonment. Everyone believes in endings thus the people of the planet are standing by to die.

THE YEARS

After transplanting/repairing body organs,
at what point is self still of woman born?
after becoming a beehive of transplants,
grafted parts, after replacements,
is there still a self from woman born?
after biological break down
and up to date repairing,
will self be a patch-work-of-spare-parts?

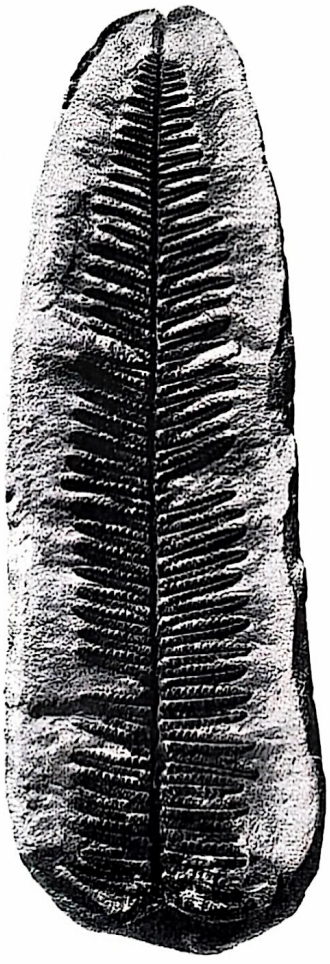
2019: Synthetic membranes introduced
to repair stomachs, intestines, kidneys.
2021: Fluorocarbon liquids/base for
artificial blood/patented in 2008/
will with synthetic polyvinyl hydrogel replace
natural vitreous liquids.
2034: Chemical muscles: still shunned
by body engineers developing techniques
to force the body into regenerating
its missing or damaged parts.
2045: Techniques for grafts to brain area
controlling physiological processes
are in daily use/all work on cerebral
cognitive thought areas is advanced
though performed selectively.
2050: Alien tissue ruled accessory
graft receiver retails the I original/
foreign tissue subdued and acclimated
by self of woman born still risking to persist.

After body, after repairs, after transplants,
after self, after behive of organs, after grafts,
after patch-work replaces self of woman born,
after after, after that! what and where?

BIOREGION AND HUMAN LOCATION

Peter Berg

This is a transcription of a talk given at the University of North Carolina last year.



Giant fern the genus *Pecopteris*, which fixed atmospheric carbon dioxide 300 million years ago, left the imprint of this frond in a thin layer of shale just above coal seam in Illinois. (Smithsonian Institution).

It's been a ferocious run the last couple of days, but I feel more assured by all of it and I want to use this opportunity, feeling that way, to talk about some of the deep implications of bioregional work. There is some hard data to all of this, but most of it's going to be speculations about civilization.

Alexander Marshack epitomizes the kind of rethinking and reconception of the Pleistocene period that's marked anthropology most significantly in the last 15 years. Marshack's investigations began because he was hired by NASA; his job was to figure out the significance of the first space shot in terms of "the ascent of man." He had a background in civilization and culture, so they asked him to start at some appropriate place, like Greek civilization, and proceed to Venus. But he had more integrity than that and thought it might be better to start with the beginnings of agriculture. Agriculture seemed to be already a very complex and dense system though, so he decided to take a pass at trying to interpret some of the artifacts that existed before agriculture.

One of them, in the Peabody Museum in Cambridge, was a bone from Africa that was apparently an antelope femur that had been broken off at both ends and incised with irregular marks that looked something like the teeth of a broken comb. No one knew what it was. Around 20,000 years old, carbon dating. So he ran it through a computer that NASA was letting him use, one of the information pirate computer operations that take place more and more, and he found that at that period of time those marks corresponded roughly to lunar cycles. Somebody 20,000 years ago was bothering to record cycles of the moon on an antelope femur! That struck him as respectably dense and complex as well. Another thing that was available to him was infrared photography. (They've got all the new toys, those space people.) So he thought if he took that into the caves of southern France, where there are cave paintings, he could photograph those paintings and come out with more material than they previously had about them. He discovered that almost every painting in those caves was painted over several other paintings. In fact, there were a lot of "gratuitous" items in the caves that didn't fit with the Official Hunting Magic theory of the paintings. A lot of people were blowing paint to make negative images of their hands or sticking their finger in a paint pot and popping it in the middle of a circle. Animals were carved into rocks that naturally resembled, for instance, the neck of a horse. There

> Looking at the Ishango bone I therefore asked: Why should an adult Mesolithic man—or woman—before history and agriculture, be playing arithmetical games?
>
> It seemed to me that the bone from Ishango, instead of representing a simple arithmetical game, was more significantly some sort of *notation*—arithmetic or not—and that it had intentionally been made for some purpose, whether playful or useful, and that it contained some storied meaning.
> —Alexander Marshack, *The Roots of Civilization* (McGraw-Hill, 1972).

were some very complex things and the dates were getting to be 25,000 years ago. Marshack began to be intrigued by the possibility that what was going on in the Pleistocene period was a civilization. That idea is very hostile to the idea of civilization that we've had for the last 4,000 years.

It was a Catholic priest who first stumbled on those caves at Lascaux. He was so offended by the possibility that the people who produced these paintings weren't able to be granted salvation that he claimed the legbones were reversed. His rationale was that they weren't human beings created by God roughly around the time of Adam and Eve, which was some time after these folks. As another antidote to these received notions of Pleistocene, read Marshall Sahlins' *Stone Age Economics* which makes an elegant argument that these cultures were the first "affluent" societies. They had an economy of abundance, a ten hour work week, and spent most of their time in a kind of sophisticated social life. The argument being advanced is that they were polysexual.

Recently other anthropologists have come up with significant evidence that there is a dominant cave architecture, a "living in a cave" kind of architecture. The cave is always sheltered by a ledge. It has a raised mouth. It faces East so that the sun comes in the cave in the morning. You can always see a glacier from a cave. The Pleistocene people lived with glaciers and didn't expect the glaciers to go away; they weren't waiting for the glaciers to melt for civilization to begin. There's usually a rocky moraine around the caves and there's always a valley below. You can see it from the cave. There are trees along the valley. Fish come up the rivers. There were Atlantic salmon in these rivers. Migratory herds of ungulates, all kinds, some of which are extinct now. They came during the summer to eat grass on the side of the valley. Migratory birds came through. The birds lived in the trees when they were there. Apparently the people weren't very hostile. Most of the things that the early French anthropologists called "baton" and thought were something you hit somebody with are actually to carry in your hand as a record of the seasons. They have carved drawings of inter-species activity at a particular time of year. Springtime was shown by salmon migrating. Salmon jaws grow two inches when they hit fresh water, when migrating, so you know it's springtime. Flower blossoms, snakes balling! All of these species activities are very seasonal-specific, and they are very sophisticated carvings.

Era	Period	Epoch	Time before present
Cenozoic	Quaternary	Recent (about last 5000 yr)	
		Pleistocene	2.5 million yr
	Tertiary	Pliocene	
		Miocene	
		Oligocene	
		Eocene	
		Paleocene	65 million yr
Mesozoic	Cretaceous		
	Jurassic		
	Triassic		225 million yr
Paleozoic	Permian		
	Pennsylvanian		
	Mississippian		
	Devonian		
	Silurian		
	Ordovician		
	Cambrian		570 million yr
Precambrian	Proterozoic		2500 million yr
	Archeozoic		4600 million yr
	(Archean)		(origin of Earth)

Note: Nomenclature for the Precambrian is not yet agreed upon. Dates given are very approximate.

The most fascinating and most suggestive of all the artifacts at Ishango is not a harpoon point but a bone tool handle with a small fragment of quartz still fixed at its head. It may have been used for engraving or tattooing, or even for writing of some kind. Even more interesting, however, are its markings: groups of notches arranged in three distinct columns. The pattern of these notches leads me to suspect that they represent more than pure decoration.
—Jean de Heinzelin, "Ishango," *Scientific American* (June, 1962).

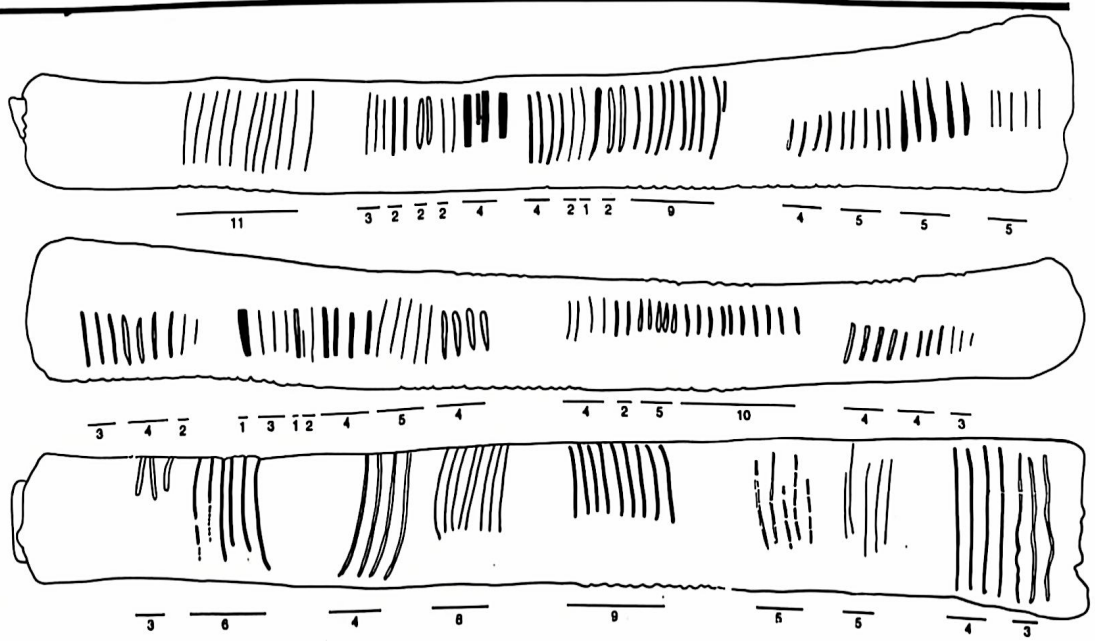
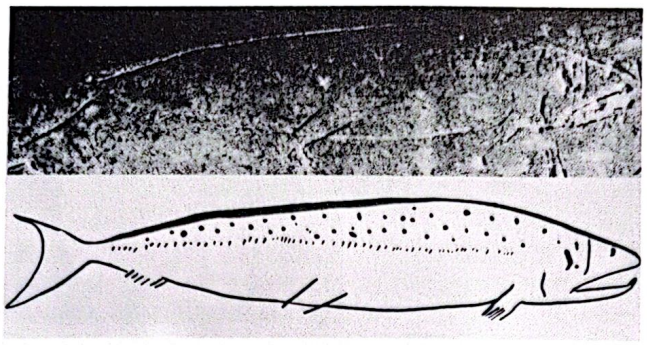
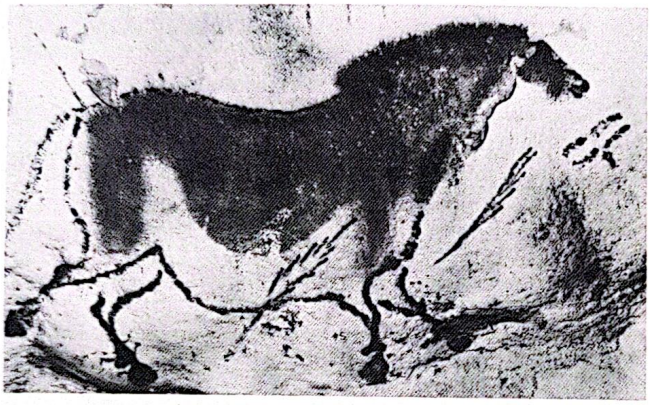


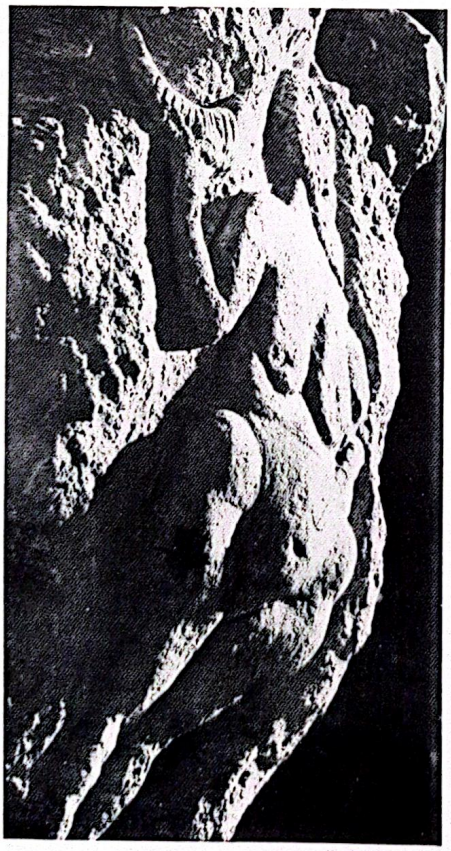
Diagram of engraved bone from Ishango, Congo, c. 6,500 B.C. which began Alexander Marshack's research.



Photograph of salmon on the Mongaudier baton.
Line rendition of salmon as determined by miscroscopic analysis.



A painted horse from the cave of Lascaux (Dordogne).



Bas relief from Laussel (Dordogne) showing female turning her head to the horn held in her raised right hand. The horn has thirteen marks.

Pleistocene people had a civilization. One of Marshack's criterion for regarding their art is *use*. It sounds overly pragmatic at first, but when he describes art as being useful, it invites a new idea of what these people thought of *as* aesthetics. Apparently you didn't just paint something on the wall. You know what it took to go down in those caves to paint? It's pitch black. You walk three miles, and you come to an underground river. It has a cliff hanging down in it. You would not know that unless you had previously tried to get past it. You have to dive down into an underground river, swim underwater, past a rock hanging there (this river hasn't changed: it's as it was 45,000 years ago), and come up on the other side. Somehow you've kept dry a torch, a paint pot, and a blow pipe for blowing the paint; and then you go another mile up to a high point where no one has been before, you stick your arms in a hole (where you can't see what you're doing), and you paint an exquisite mastadon inside that small hole, with your little kid. There are adult footprints and a child's footprints beside them. It's as great a feat as a mountain climbing expedition. A geologist friend of mine compares it to that alone.

There were people who came down and used things that were painted. They would reach in their paint pots and daub a color on their finger and pop a mark, and then perhaps go over to another place, something like a stone altar, with paintings of animals copulating inside it, and put their handprint there. It might have been a wedding ceremony. That art would have been useful.

How different a view this is than that of Thomas Hobbes who said the life of primitive people is "nasty, mean, brutish, and short." Hobbes is one of the theoretical architects of the kinds of epistemological argument that brought a science called economics. Naming the life-stuffs. Giving names to the products of nature. Looking for products rather than process. Quantifying particular items as they occur in the biosphere.

Pleistocene civilization is before industrial civilization, before Roman civilization, before Greek civilization, before the appearance of domestic agriculture; it is a *wild* civilization. It is based on our interconnectedness with natural cycles and draws its morality, ethics, and values from that relationship. Before anybody said, "God told you to." Before anybody said "Any *reasonable* man would." Their ethics and morality were based on their interconnectedness with natural cycles of the planet in a very difficult time to live, the Ice Age. By the way, Pleistocene figurines, "Venus" figurines, are found in a distribution that goes through the southern British Isles all the way to Siberia. Inviting the notion that it was not only a civilization, but that it was a continuously connected civilization. They knew each other!

We haven't thought that human beings *had* to be connected with anything around them for quite some time, at least since the Greeks. That's why a director of the space program said, "The moon flight of Apollo 8 is a triumph of the squares, meaning the men with slide rules and crewcuts who read the Bible and get things done." Not the guy who ate something for breakfast, thought about the other things that were alive, etcetera.

Economics was the quintessential science of the industrial age. It has been the recent basis of politics out of Marx on one side and Rockefeller on the other side. But it's also been the way we've been taught to quantify existence. How much does it cost? What's the brand name? Where did you hear about it? How do we get it from them? How do we get ours to them? How do you *sell* that idea?

Economics is to the industrial age what "ecologics" will be to planetary civilization. We are entering a period when the planetary biosphere will become the major subject of our civilization concerns. It is no longer "the fate of man." That's not the subject. The subject is the fate of the planetary biosphere. We now have the capacity to destroy it. We have a need to develop the values and ethics necessary to preserve it. The basis of this will not be found in our history since the birth of agriculture; it will be found in the values, ethics, morality, revelation of Pleistocene people. Pleistocene civilization will be the model for planetary civilization. Human species on a planet together. That's going to be the foreground. Background? The planetary biosphere of wholeness, magic, ability to perceive oneness: procreativity. We know that this is the new paradigm. Whether it's in globalist terms, which says there should be further quantification (we should pave Africa) and remove ourselves from this planet's limits through space travel; or planetary terms, which I think are distinct from globalist terms: that we have the opportunity to invite human species consciousness as a real fact and that a *future primitive* civilization will be developed around our relationships to the natural processes of the planet.

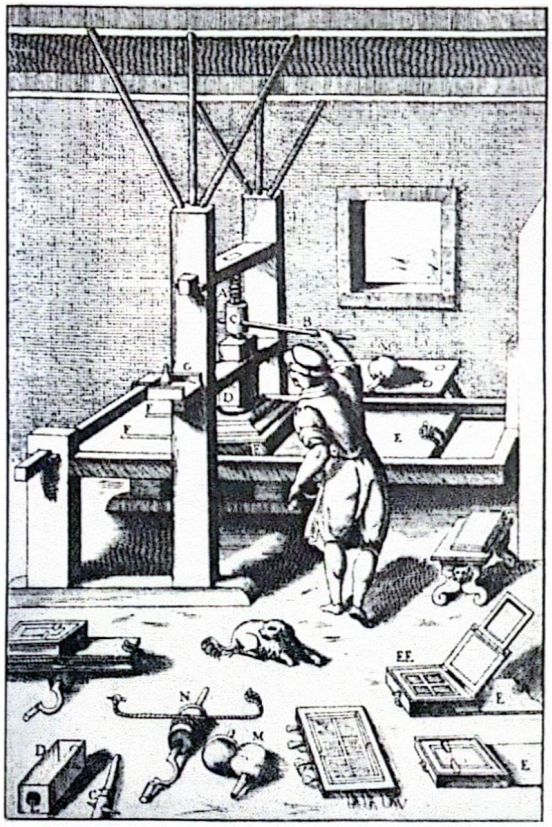
Bioregions make appropriate locations for decentralization. If you want to get to the hard bolts of breaking down this oil economy, you want to have political, agricultural, economic, social, and energy decentralization. What is going to be the locus, the site for alternative energy? We could have utility districts based on watersheds, in a bioregion. Bioregional planning can be insinuated into the existing structure. You can be part of a group that is going to consider the content of the curriculum at this university. A *centralized* university. Then you can decide to form a bioregional department that could eventually *decentralize* the university itself so that it exhibited the condition Bateson admired so much, resonance: that what you see around you is what you're feeling and thinking and must be what makes you feel good. Why would a Balinese make the same carving for a door as on the prow of a boat? That could be referenced in a dance? For which there might be a puppet figure as well. Why keep those same images? Because they work. Because in the minds of the people they resonate with the place itself. A Santo Domingo Pueblo Indian told me that his paintings were once seized by the men from the kiva because he had represented figures from the kiva in the paintings although he had never been in the kiva. But he was a Santo Domingo Pueblo, they said, and naturally he's got those things in his mind. And naturally we do. Naturally we do. Some of us have Gaelic memories, the people who invented *whiskey*, "the breath of life."

Assuming that we can create a civilization appropriate to living in the biosphere, what will be the relationship between cultural groups that already exist and the reinhabitory groups? The U.N.? Is the U.N. going to be able to arbitrate the biosphere? Is it possible for the United Nations with France, China, and England when England is losing Northumbria, Scotland, Wales, Cornwall, Ulster? No. What will be the underpinning for the forms of the relationships between these ethnic cultural groups that can become a planetarian mode?

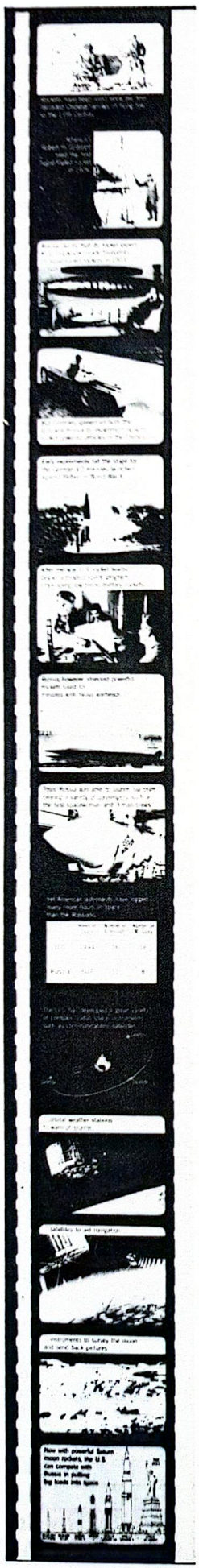
There has to be a new politics based on reincorporating the social and natural sciences together in a way that is appropriate for developing a planetarian civilization. It has been suggested that history will have to go into the biology department. We'll be using the texts Olson outlines in *Essays Towards a Science of Man*. We'll be using Carl Sauer's *Land and Life*. We'll be using Alexander Marshack's work. We're going to be

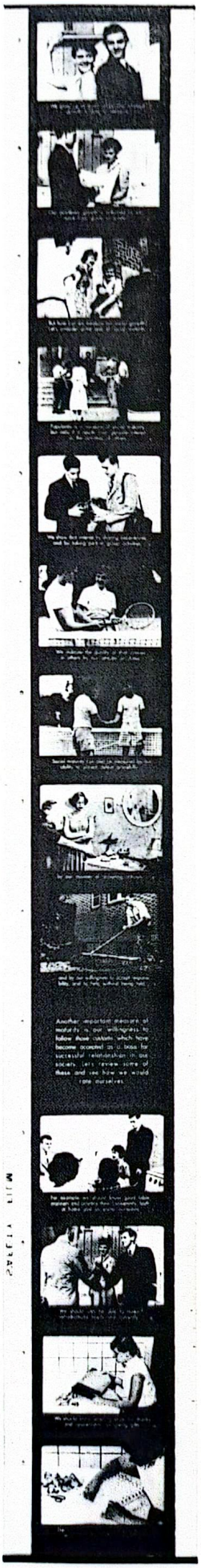


Cuneiform tablet with account of creation of the world. Babylon, c. 650 B.C.



Printing Press, c. 1607. (The Science Museum, London).





drawing from the healing women that know that "wicca" meant wisdom not witchcraft. The Gaelic women knew that. We're going to descale economics and take it apart to find out how we manage to objectify all of those things that occur just because natural processes occur. For example, how far out has it gotten when someone decides clouds should be seeded so that there will be a larger crop so that it can be sold for a bigger price? What happened there? Why does it rain? Why are children born? Those are the real things. These aren't single separate items; they are really the basis of our species' relationship to the biosphere. What Faustian trip led some calculus-spouting maniac to come up with cloud-seeding? We feed women beef raised on a hormone that will only appear as a mutating chemical in their daughters. What are these people thinking about? All right, they just didn't think about that; it was a mistake. They just played with something. Now they want to find out how to make it all right again. They're going to take the PCBs out of the garbage dump, it's gonna be all right. How do the PCBs come out of the garbage dump? They're already in the water supply! "A little acid rain is a fair exchange for our standard of living. What the hell are you complaining about?" Quantifying. They're always quantifying. There are people who would rather die than live like that. But is that why there's a 15 percent suicide rate on Indian reservations—of teenagers?

It comes in over the television set. Bump yourself off.

In ecological terms, every time you diminish the capacity of a whole ecosystem to provide some variable that is distinct and diverse, which may be helpful to you in an emergency, you weaken the capacity to deal with unforeseen emergencies like PCB poisoning. Monoculture in civilization means the establishment of one culture as the dominant mode for this planet: Global monoculture, suit and tie English-derived American businessman costume. McDonald's hamburgers from Venezuelan beef raised by clear-cutting the Amazon jungle for grass. And the next year it's dust. The forest won't ever grow there again— because it grew on the corpse of the last forest and that's been taken away. To the hamburgers wrapped in more paper than it would take to write a doctoral thesis. That's not civilization. That's global monoculture. They have McDonald's in Paris! McDonald's in Tibet! Global monoculture is diminishing the diversity of the culture of our species in ecolocales, which weakens us as a species. Because we don't have our former resiliency. If the plug on oil gets pulled and the fridge isn't there, and the supermarket isn't there, what are we going to do? Is that "progress?" If we keep up global monoculture we will die.

People ask where I am from, and I say the confluence of the Sacramento River and San Joaquin River and San Francisco Bay, of the Alta California bioregion, of the North Pacific Rim of the Pacific Basin of the Planet Earth. We're relocating ourselves from world to planet. Biogeography has come up with biotic provinces and biogeographical provinces that can be used as hard data. Quantified biogeography is late in the development of science. Buried in the International Union for

Target: The Moon, December 1967 (Courtesy of *The New York Times*, Educational and Book Division).

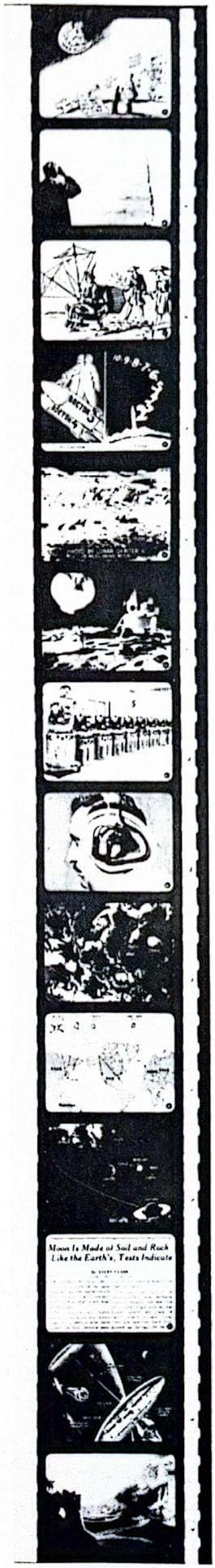
Developing Social Maturity, 1961 (Courtesy of The Pathescope Company of America Inc.).

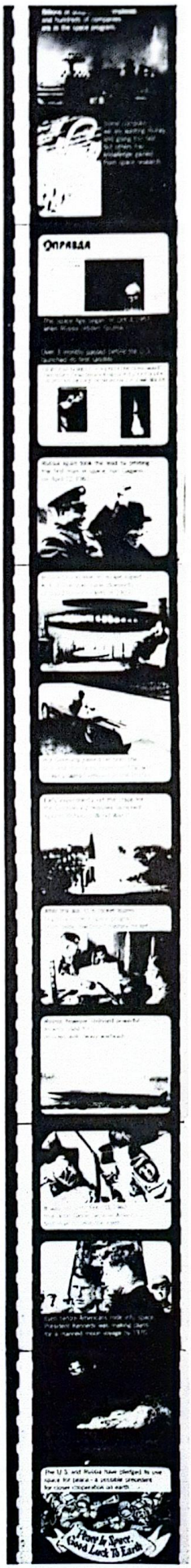
the Conservation of Nature and Natural Resources in Switzerland, the work of Raymond F. Dasmann attempts to divide up the planet into life zones and biotic provinces, what he describes as "a planetary-scale mapping of biotic provinces within which similar ecological conditions prevail and between which there are marked differences of plant and animal species and vegetation (plant *structure*—savanna, rainforest, etc.)." Together with Miklos D.F. Udvardy he produced a world map of biogeographical provinces which is a way of locating yourself on the planet rather than in the world. The *world* is the conflict of national interests. The *planet* is a living organism, right? Where is North Carolina on the planet? It doesn't exist, right? It's a world phenomenon, but the Piedmont, that's on the planet; it's an anatomical part of the planetary biosphere.

How are you going to have conservation when you have all these national political entities, so that there isn't a bird, but a Saudi Arabian bird? You're in the Austroriparian zone (austro-south, ripárian-shore) the south shore of North America; that would make some sense to words like Tidewater, right? That would be the large area that you belong to, of the Nearctic Realm. Your deer here are white-tailed deer. I never see white-tailed deer; I live on the coast of California. I see black-tailed deer and mule deer. How can you preserve white-tailed deer with a *national* U.S. policy when they don't occur on the western side of the Sierra Nevada?

There's an interesting set of meanings hidden in the word region. It's connected to the word for king: Latin, *rego*, and Greek, *orego*; region, if the king owned it. We know the king lives in a palace but the region is not the palace. Which leads you to the concept of bioregion: a life-place outside of the centralized civilization mechanism which has unique flora, fauna, soils, weather and topology; all these become the basis of boundaries. Watersheds are the organizing principals of bioregions. You know, most little towns planned their water supply before they gained their present populations; and *now* they plan how they are going to divert a river to support that new suburb. That's the wrong way to go. You have to decide how to get people who already live in that watershed to live in such a way so the watershed won't die. Because if the watershed dies it's like losing the arteries or fingers: which is the problem we've had with this frontier psychotic Western civilization of these last 400 years.

There is a need for a cultural concept of a "bioregion." If the biosphere is the issue then how one lives in place (because places are the anatomical parts of the biosphere) becomes a primary consideration. Your head can be any place, but your feet have to be *some* place. Bioregion is a cultural concept, really, not a scientific concept. It should be up to the people to define a bioregion rather than having it come down from the institutional scientific elite. There should be a planetarian feel to it: that we will become reinhabitory people and we will begin redefining our locations in planetary terms for ourselves. The goal of reinhabitation in a bioregion would be to succeed at living in place, a future primitive planetarian mode.





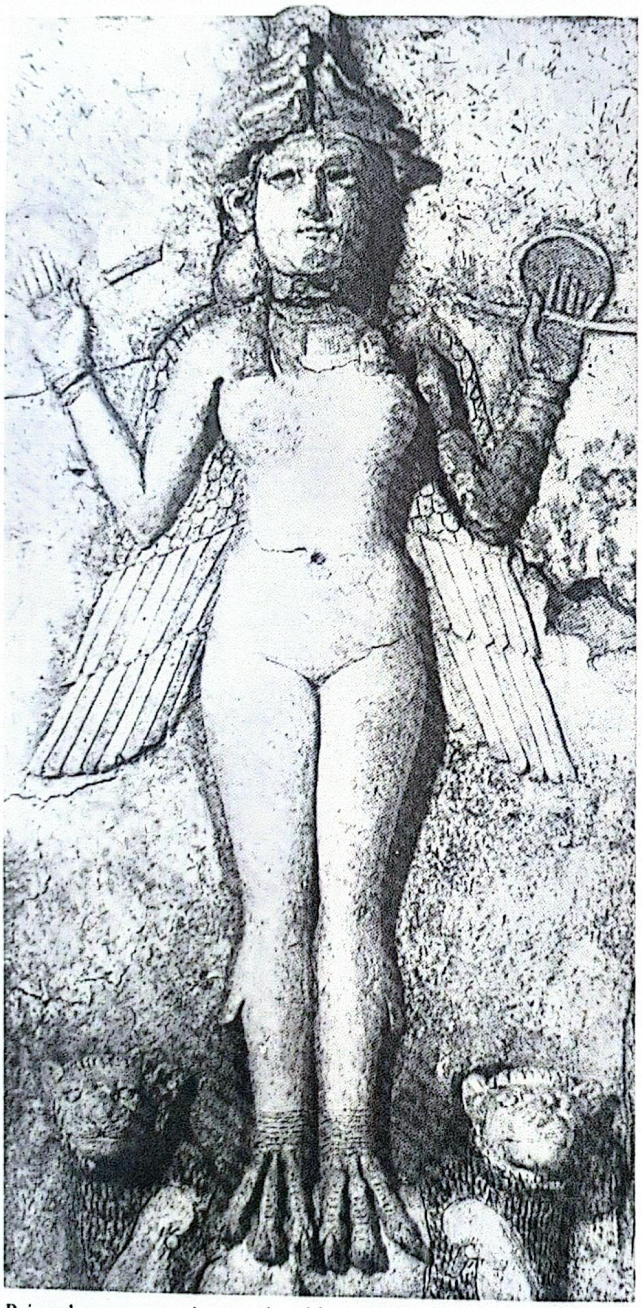
Man on the Moon, 1961 (Courtesy of *The New York Times*, Educational and Book Division).

Book Review

BEYOND GEOGRAPHY

Frederick Turner
Viking Press

Paul Metcalf



Painted terracotta plaque of goddess Lilith, "Bringer of Death" holding symbols of justice. Her name is associated with owls in Gilgameth epic and the Old Testament (Isaiah XXXIV, 14). The "Burney Plaque" (2000 B.C.), University Museum, University of Pennsylvania.

It is a commonplace that since the days of Homer, the poets of Western civilization have from time to time turned to history as a resource. Of course history in Homer's day was mythic; in the preface to this work, Frederick Turner marks the distinction between ancient and modern times, describing the expansion of European civilization to the wildernesses of the world as "the story of a civilization that had substituted history for myth as a way of understanding life." Nevertheless, for those of us mining the resources of history today —Ken Irby, Richard Taylor, Charles Boer, myself, among several others—it is still the mythic force that we celebrate. Early on, Turner quotes Robert Duncan: "The myth or pattern of elements in the story is a melody of events in which the imprint of knowledge—knowledge here in the sense of a thing undergone—enters the generative memory and the history of man takes on tenor."

Generally speaking, the orthodox historians have not seriously acknowledged all this fuss and celebration by the poets. History has in fact become two properties—one in the hands of the academic historians, and the other belonging to the poets. Child psychologists have a term to describe the behavior of small children, when they play side by side, but not *together:* "parallel play". It may be the same set of toys, but they are not shared; there is a gap.

In this work, Frederick Turner comes closer to closing this gap than in any recent work of history that I have seen. In his preface he announces: "The way I chose to write may be closer to that of the literary artist than to that of the historian." The book opens with a series of "Extracts (after Melville)", and during the course of the writing he has occasion to quote Whitman, Lawrence, Pound, Williams, Faulkner, Olson and Duncan. A major virtue of this approach immediately becomes apparent: although Turner's reading and documentation are profound and scholarly, the work, instead of being simply a collection and organization of data, becomes a force, a dynamic, the drama of history driving at our very backs and shoulders.

Throughout the book Turner the historian implicitly shares the poet's initial and enduring mistrust of predatory, mechanized Western civilization, and the way in which it has overrun this hemisphere. In the "Extracts" he quotes D.H. Lawrence: "A curious thing about the Spirit of Place is the fact that no place exerts its full influence upon a new-comer until the old inhabitant is dead or absorbed." I am reminded of a remark by Jung, who takes this notion a step further: "Certain Australian primitives assert that one cannot conquer foreign soil, because in it there dwell ancestor-spirits who reincarnate themselves in the newborn." Elsewhere, Jung concludes that "the American presents a strange picture: a European with Negro behavior and an Indian soul." In any case, Turner describes the book as "an essay in spiritual history," stating that "it is founded on that surest of realities: the human spirit and its dark necessity to realize itself through body and place."

* * *

Following chapters entitled "Estrangement" and "The Necessity of Myth," Turner plunges at once into his origins, "Bearings from the Ancient Near East":

> The Israelites shared much of the same landscape and its challenges with the Sumerians, Babylonians, Canaanites, and Hittites, and thus also certain attitudes toward it. As these hardened semi-nomads viewed from their tents the luxuries of the cities of the valleys, the city itself and the settled life it

nurtured became a reference point in many of their traditions, standing in ever starker contrast to that dry, marginal existence they themselves led.

This was the "Fertile Crescent" of the Near East, where agricultural margin and surplus were first established, allowing the growth of cities of leisure and luxury—cities that the Israelites, among similar nomadic tribes, tried and failed to penetrate.

The cities were violent and male-dominated, the myths speaking of the destruction of the primal goddess who dominated the "natural," i.e., hand-to-mouth pastoral and early agricultural existence. Nature, for the first time, became an alien force to be attacked rather than propitiated. The conquering males fought not Nature but each other, and the walled cities became enclaves in which affluence produced leisure, and the women served the wildly expanding lusts of their men.

Condemned to wander in the wilderness, the Jews nevertheless remembered and memorialized the cities of luxury:

> ...and replenish the earth and subdue it: and have dominion over the fish of the sea, and over the fowl of the air, and over every living thing that moveth upon the earth.

The Israelites cursed the denied Edens, as Sodom and Gomorrah—for their sexual license. And concomitantly they assumed a code of sexual purity for themselves—thereby setting the stage for later Catholic celibacy, and the strictures of the New England Puritans.

But the Jews nevertheless remained polarized between the city and the wilderness, the fleshpot and the desert, the licentious and the ascetic—and the tensions between these poles served to replenish their energies.

Much of a similar nature may have happened to other wandering tribes of that time, but the Jews were the first to inscribe a consecutive historical record.

History, in their hands, vanquished Nature.

In the wilderness, Nature had tormented them—and they marshalled and gave over to their god, Yahweh, all their spiritual forces, to deliver them from their torments.

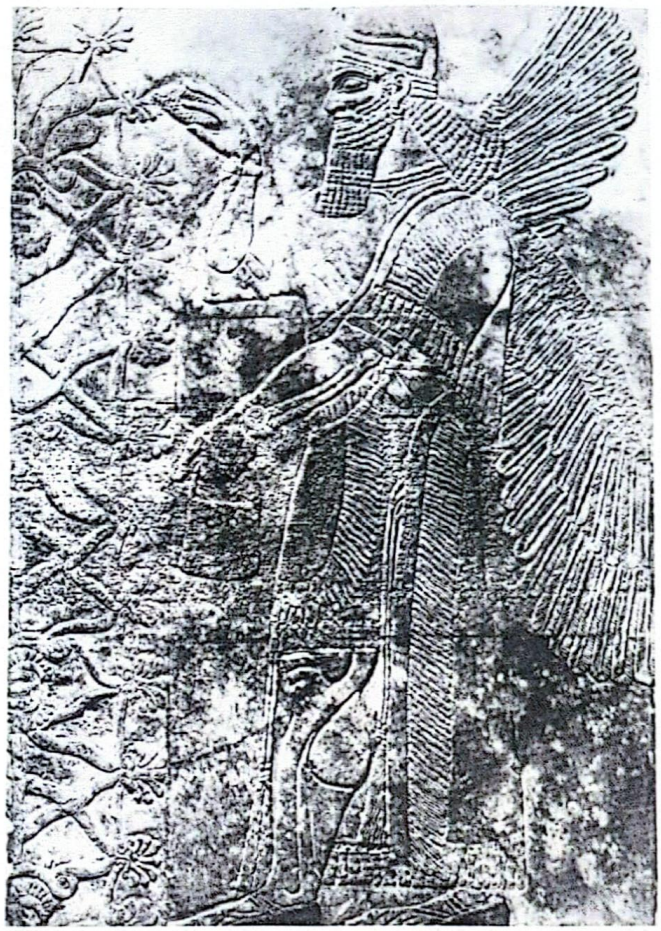
It was a desperate and arrogant gesture—later to be repeated in all its ripeness by the Pilgrims and their associates, against the "naturals" of the Western continent.

* * *

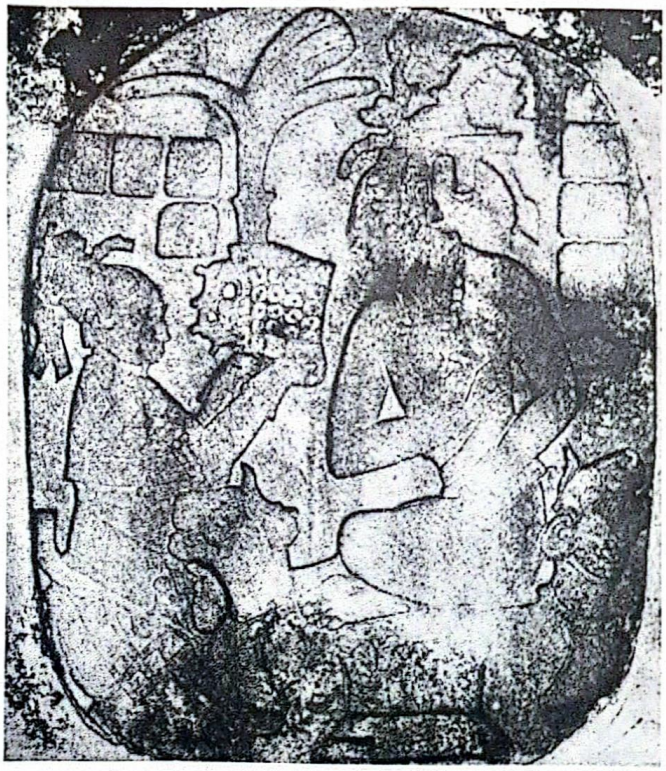
Moving past the birth of Christ and the origins of Christianity, Turner documents the conquest by the new religion of the disintegrating Roman cults—the suicidal instincts of the Empire creating innumerable interstices into which Christianity surged.

Following initial success, there came, very quickly, the "routinizing" and "traditionalizing" of Christianity, the transition from cult to church, insuring an institutional future. In this stable form, the faith became a regularized, anti-natural system, dominated by the church-tower clock, which pealed forth the hours for prayer. Man's animal nature was generally ignored, thereby rendering him eternally restless and uneasy. Turner quotes the remarks of an aging Pueblo Indian:

> See...how cruel the whites look. Their lips are thin, their noses sharp, their faces furrowed and distorted by folds. Their eyes have a staring expression; they are always seeking something; they are always uneasy and restless. We do not know what they want. We do not understand them. We think that they are mad.



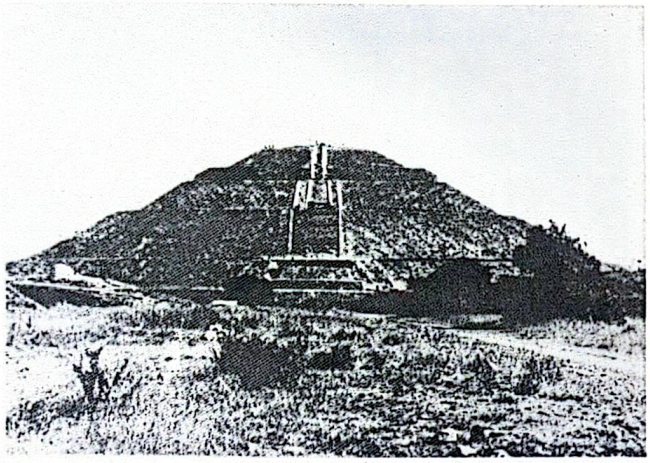
Winged human-headed divinities stand on either side of the king and before the sacred tree, administering purifying substance with date-palm spathe and bucket. Mesapotamia c. 1500 B.C. Metropolitan Museum of Art. Gift of J.D. Rockefeller, Jr.



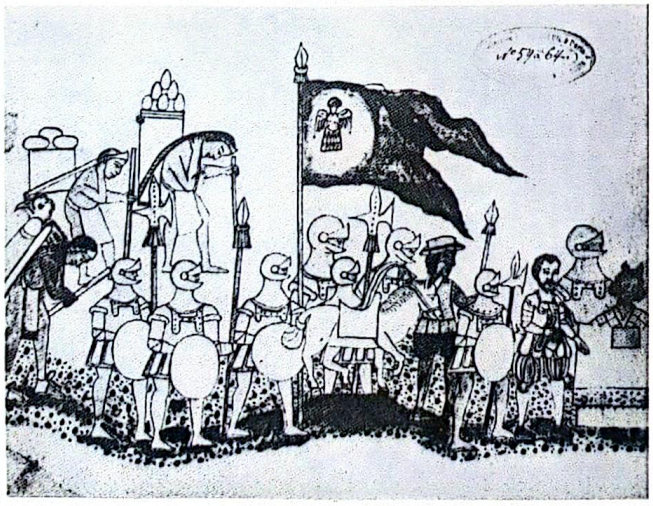
Palenque, Yucatán (Mexico) 600 A.D. The Maya shared ritual expressions with Hindu Buddhist culture including stepped temple pyramids, doorways with serpent columns and balustrades and sacred tree forms.



Burial mound carving at Monte Alban, Oaxaca, Mexico.



Pirámide del Sol. (The pyramid of the Sun) Tenochtitlan, the Aztec capital, 1300 A.D.



Codex Azcatitlan. Spanish forces march into Mexico. (Courtesy of the Museum of Natural History).

Early in the life of Christianity, the Church authorities outlawed renewal by revelation, in order to insure the stability of their institution. The Christian was thus from the beginning spiritually starved—unlike the mythic, pantheistic, primitive peoples, whose contact with their spirits was daily re-experienced.

Like his Israelite ancestor, the Christian divorced himself from Nature, and then attacked Nature—at first inwardly, by mortifying his own flesh, then outwardly, in attacks upon the infidel: the Crusades, the Inquisition, and finally, following westward exploration, the extermination of the American Indian. This was and is the age of genocide, of sacrificial violence against the Jew, the Moslem, the Asiatic, the Native American. (In this light, the failure of the Church to take a stand against Hitler becomes clear: the Holocaust was close to being a child of its own making).

Exploration of the globe, movement outward, is seen as the geographical extension of this same drive: to bring the rest of the heretic world into harmony with the Christian nucleus.

To their amazement, however, the Christians found the "empty", the "demonic" world that they explored to the west—North, Central and South America—to be filled with a diverse mix of peoples, rich in a wide range of just such Nature-immersed mythologies from which the Israelites had, centuries before, by a fierce effort of will, removed themselves. Even those whites who took the trouble to desist from slaughter and plunder long enough to study these myths became badly confused. Turner mentions D.H. Lawrence, who "inveighed against scholarly attempts to analyze these fictions to live by. We *may* analyze them, he wrote, but if we think we have thus denoted their meaning, we only reveal ourselves silly and partial." The analysis is no more the myth than a map is the land.

Turner delineates the contrasting reactions, native and European, to hemispheric environments:

> In the huge and untamed New World the native communities were constantly in the presence of newness and strangeness, but where European sojourners felt terror and reacted with a hostility sanctioned of old, these natives often found spiritual sustenance.

The distance, the great zones of misunderstanding, between Native and Christian, grew larger and larger.

* * *

In the chapter entitled "Defloration", the subject is Columbus, and we are reminded at once that his Genoese parents named him Cristoforo, in honor of that pagan-turned-saint, who bore Christ across the waters.

Beyond the greed for gold and spices, Spain's "goal was still the East and the outflanking of the rival monotheism of Islam." It is well to remember that the Islamic Moors had invaded Iberia, had enslaved thousands of Christians, sending them to the galleys.

Whether or not Columbus "discovered" America, he opened the Indies in an effective way, and presented them to Europe —thus giving the despairing and spiritually starved Christian world a second chance. And he set in motion, or released, a train of expansive energies: "Cortés, Coronado, Soto, Raleigh, Hudson, La Salle—the list goes on, nor does it end with the dead planet of the moon."

Columbus believed "to the end of his days that the enslavement, exploitation, and extirpation of these naked

ritualists conferred strength and new vitality upon Christian civilization."

There was only a single voice of doubt among these early Spaniards: Bartolomé de Las Casas.

> Though he could never bring himself to admit that there was something radically wrong with Christianity itself, Las Casas became adamant in his conviction that it was surely diseased in its New World practice. Though he could not admit that something in the history of this religion made men callously commit great cruelties in its name, he could name those cruelties and he came very close to discerning one of their causes: the divorce of the faith from the human body. The Christians despise these natives, he wrote, because they are in doubt as to whether they are animals or beings with souls.

Needless to say, he was "Despised and ridiculed in his time as a fanatic and troublemaker..." His words were crushed in the stampede that followed him.

* * *

Following "Defloration" comes "Penetration"—Cortés, and the very special case of the Aztecs, who had themselves recently accomplished a Christian-like expansion and domination in the Valley of Mexico.

> What we seem to be confronted with here is the spectacle of a culture that has given itself over to a historical mission in a world that knew no such thing as linear history and was still devoted to the cycle of myth. At the same time, this culture was powerfully influenced by the ancient examples of myth it encountered in the Valley of Mexico. The Aztecs may have seen themselves as marching toward their destiny over roads paved with the dismembered corpses of their sacrificial victims, but they paid their own sort of tribute to the mythic past they imitated in style and structure. In fact, they were still in some ways captive to that violated past, as Cortés and his forces were now to reveal unwittingly.
>
> This cultural condition may help to explain the striking contradiction of Aztec culture—its beauty and its bloodiness, its magnificent technical achievements and its crucial spiritual failures. It would help to explain also the spectacularly rapid conquest of the valley's established city-states, for as the Aztecs were to find out, those still in the grip of myth are never military matches for those devoted to a historical mission. Always in such confrontations the iron tip of destiny penetrates the sacred round.

And so Cortés accomplished his conquest—writing at one point that "we were only doing what we had to as Christians."

* * *

Christianity, as we have seen, had a unique orientation to the world, an orientation that emphasized the capacity of rational thought to render Christians lords of all earthly creation. In the age of exploration Christians of all nationalities and persuasions were united in a conception of the earth as a divinely created *thing*, there for the enjoyment, instruction, and profit of man. Though the nearest derivation of this view seems to be Augustine, who viewed the world as of no intrinsic interest, its ultimate derivation is Old Testament scripture as rendered through Christian exegetes. There, in the deeply incised record of a new monotheism turning away from the natural world toward the adoration of a god so otherworldly that his name could not even be written down, is the beginning of the superimposed sacred history.



La Salle (Public Archives of Canada).



Portrait of Cortes, 1525. (Museum of History, Chapultepec Castle, Mexico City).



Sir Walter Raleigh, painting by Nicholas Hilliard, 1618. (National Portrait Gallery, London).

But our interest in this goes beyond the process itself and its opening up of the globe to Christian activity. Our deeper interest lies in the fact that the erosion of authority was also at work on the Christian religion itself and for exactly the same reason. For just as the Christian world view had permitted challenges to the scientific wisdom of the ancients, so now with incremental power that view unwittingly permitted, indeed encouraged, covert disregard of the authority of religion through non-traditional investigations of nature that would turn up no "objective" evidence for the existence of spirit life. If the world is wholly susceptible to understanding through rational investigation, then the existence of spirits must be denied, and without belief in spirits there can be no true religious conviction.

The new Christian rational view of the world, once unleashed, left Christianity itself spiritually gutted.

* * *

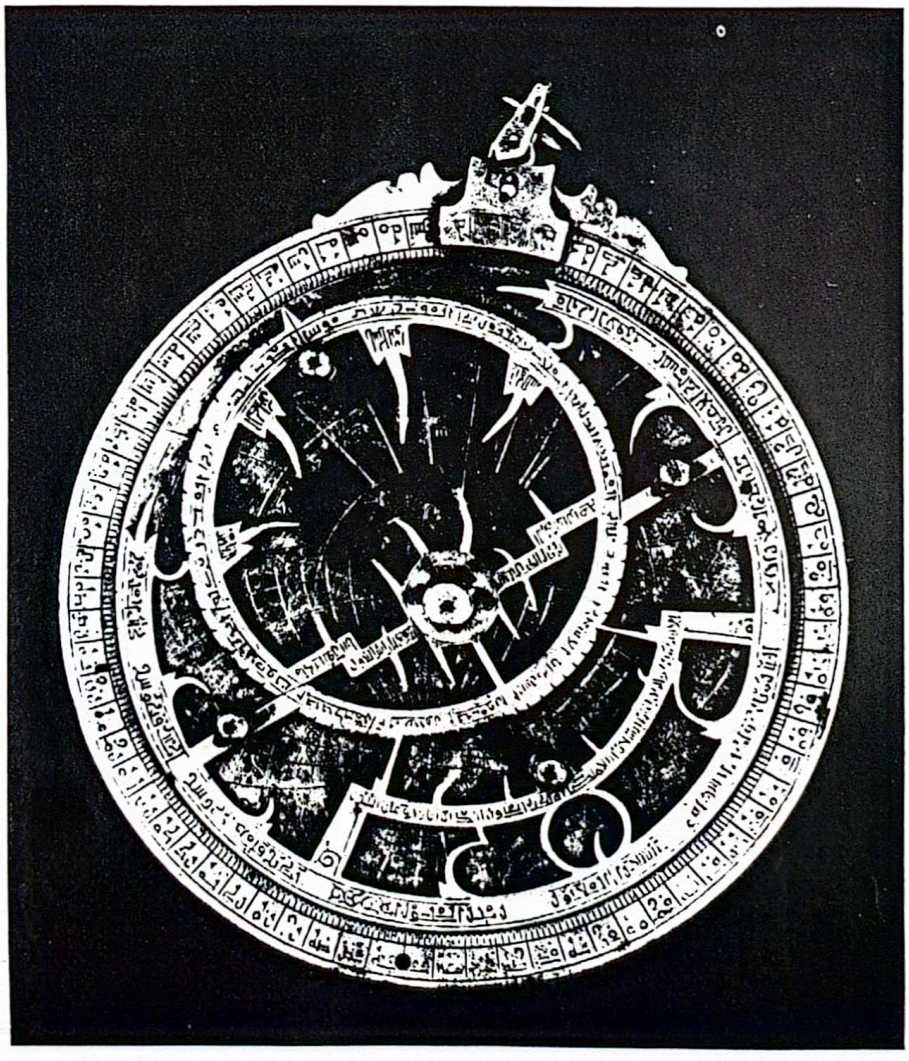
On the heels of the Spaniards came the English, belatedly awakening to what William Carlos Williams has called the "fat of the new bounty." Although arriving later, they had the advantage of an example to follow—and they began, appropriately enough, by raiding Spanish caravels. There is no honor among thieves.

Sir Walter Raleigh's first attempt at colonizing, on the Outer Banks, was in fact intended as a base for privateering.

This pathetic colony—the Lost Colony—is reminiscent of the tiny group of settlers Columbus had left at Navidad, on his first voyage... the first tentative Spanish and English settlements in the New World ending in mysterious and bitter obliteration... events perfectly belying the swarms on Christians that would so soon secure firm footholds of the shores of the continent.

* * *

Right at this point—the time of the very earliest coastal settlements—Turner again turns to a poet, focusing our attention on *The Tempest*. It is a gateway play, among Shakespeare's last—so new and so American, as fresh as the wild continent just then being entered by Europeans, the land at the same time mistily penetrating the European consciousness; a play that is at once a collapse and a beginning, the end of the *sturm und drang* of *Hamlet* and *Lear*, and yet the stage-setting for the drama, post-Elizabethan, of exploring and settling the New World.



Brass Arab astrolabe, Toledo, Spain (1029). Al-Zarqali, a Toledan astronomer (11th century) improved the astrolabe, a navigational instrument that in Christian hands made possible the voyages of exploration of 15th and 16th centuries. (Staatsbibliothek Preussischer, Kulturbesitz, Berlin).

Out of the story of Prospero and Caliban, the civilized and the savage, their relations at first friendly and then hostile, Turner leads us to the Puritans, settling in a desolate wilderness, their meetings with the Indians similarly shifting from friendly to hostile.

The Puritans and other figures of the Reformation, struggling honestly to reify their religion by going back to Old Testament originals, stripping off centuries of pomp and institution, found at the core of their souls not the spiritual well-spring they sought, but a demonic religious fury:

> At dawn of May 26, 1637—a short enough time since the great migration of 1630—a body of Connecticut militiamen with sizable Narraganset Indian reinforcements attacked a Pequot village on the Mystic River.
>
> Here the Narraganset saw for the first time that religious rage of their current allies that had lain waiting its moment of profession. And ritual warriors as they were, they cried out in horror at a magnitude of slaughter such as they had neither seen before nor contemplated. This was not war as they had known it. This was something more terrifying, more total, and at the same time curiously less focused.

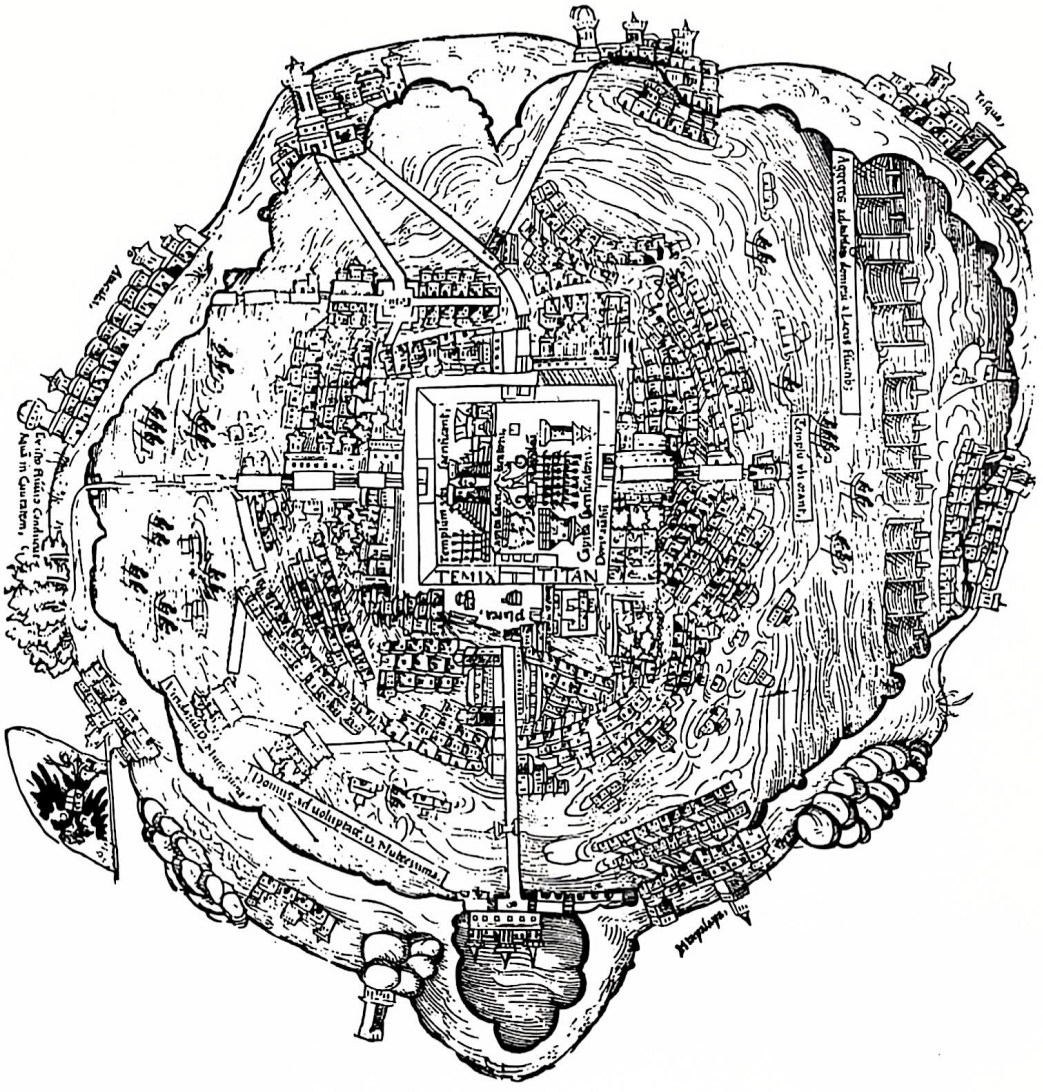
This rage exploded first upon the Indians, and then, with the land secure, turned inward upon itself, in the search for witches: a kind of perverted twist on the self-mortification of the early Christians. Finally, of course, it turned outward again in an expansionist drive, the mastery over land, Indians, and ultimately over their own white brothers, in the form of free-enterprise capitalism.

* * *

In the chapter "Possession", Turner explores the many tales of whites captured by Indians and Indianized—a literary form that became one of the earliest popular American genres. Following this, "The Vanishing New World", as the title suggests, gives us a devastating and depressing account of the rape of the land, its human and animal inhabitants, its surface and subsurface resources—a drive rushing always westward, climaxed by the California gold strike, and, still unspent, plunging into the Pacific, the whaling industry, that washed (as Melville pointed out) to the shores of Japan.

As a kind of pathetic conclusion to this penultimate chapter, we are given Thoreau's two final words, spoken on his deathbed: "Moose... Indian... "

* * *



A plan of Tenochtitlan, attributed to Cortes and first published in Nuremburg in 1523.
(Courtesy of the American Museum of Natural History).



Sitting Bull. Photo from U.S. Signal Corps.



Black Elk. Photo by Edward S. Curtis.

The last chapter, "A Dance of the Dispossessed", is a fitting summation, a dismal rehearsal of the final dismemberment of the Indian spirit in the West. Late in the 19th century, with the white man's domination of the continent beyond doubt, there was that final feverish expression of native force, The Ghost Dancers, coalescing around the figures of Black Elk, Red Cloud and Sitting Bull, and terminating in the massacre at Wounded Knee.

Just before the final disaster, Buffalo Bill Cody had been brought back from Europe, where he was touring with his Wild West show, to mediate with Sitting Bull; but he was recalled, without ever seeing the Indian, and he returned to his theatrics.

In some weird way, Buffalo Bill Cody—meretricious, alcoholic and demented—is an apt figure with which to terminate that drive—the conquest of Nature—that had begun centuries earlier in the desert wilderness, outside the Edens, the walled gardens, of the "Fertile Crescent."

> The secret of Cody's public success was that he himself had been a heroic killer of that old, wild life he now displayed the remains of, for his fame rested securely on the reports that he had killed Indians and buffalo in untold numbers.
>
> As the tours and the applause went on and as the real Wild West steadily receded into memory, there came a change in the mind of the hero. He began to be haunted by the suspicion that he and his kind had killed the thing he had most loved.
>
> As if to combat this uneasiness, he and his associates went in for greater and ever more exotic spectacles. He still retained the riders, shooters, and stage coach. He still staged the Custer massacre and his own famous duel with the Cheyenne chief Yellow Hand in which he had taken the first scalp to avenge Custer. But now there appeared incongruous German grenadiers, the "Potsdamer Reds," in their fire-engine red uniforms. And French soldiers in sky blue, English hussars, Mexicans, Cossacks, Arabs, and Cubans in response to the Spanish-American War (in the taking of San Juan Hill, Cody played Teddy Roosevelt). There were also Hawaiians, Filipinos, Japanese magicians, a snake enchantress, midgets, a boy giant, Venetian glassblowers, a sword swallower, and even mind readers.
>
> The more unwieldy and incoherent the show became, the more uncannily it revealed the inner state of its hero, who was himself becoming unwieldy and incoherent, both with drink and with the suspicions that haunted him. His personal life was coming apart like the moth-eaten props of thirty years' packing and unfolding. He sued his wife, Louisa, for divorce, claiming that on four occasions she had tried to poison him. Louisa... filed a countersuit in which there were crazy rumors of Queen Victoria's involvement.

Before his death, Cody directed that he be buried outside the town in Wyoming that bore his name. He died, finally, in 1917—*the year of this commentator's birth*—and his widow, ignoring his request, had him buried at the crest of Lookout Mountain, overlooking the great sprawling modern city of Denver.

> And a circus affair it was, the Sells-Floto troup parading with the cortege up the muddy slopes of the mountain to its summit...

A reporter for the *Denver Post* provided the final comment:

> Buffalo Bill Cody would look eastward toward the ever-rising dawn that each morning would reveal anew the concrete realization of his dream: a great city humming where once there had been nothing but a wild New world.



Buffalo Hides, 1874. (Courtesy of The Kansas State Historical Society, Topeka).



Buffalo Bill's Wild West Show: "After the Battle" 1907. (Courtesy of The Wyoming State Archives, Museums and Historical Department).

William Margolis

from *MANU STUPRARE*

Istud quod digitis perdis, homo est.
—Martial

Bright was the flame for Kanouen

Quang Chi cast herself into it
—Ezra Pound, Canto LVI

. . . .

At Tello
30,000 tablets
and no end
to the digging.

Even the prayers
were lists
of vigorous
slaves.

One hundred & seventy two heads
for the God Sara
from the conquered city
of Sariphumma.

Ur-Nesu, patési,
will take charge.
Among them:
fifteen young girls.

. . . .

In Persia,
not far from Chalus,
where the Turkoman still walks
towards the Kara Koum
keeping the Caspian on his left
and the foothills of the Elbourz chain
on his right,

where he roams the coastal road
passing plastic module motels
and petrol stations,
where he follows the cows
and his gaily coloured, unveiled and laughing
wife
as she turns inland
as she steps through the rainy mist
and onto the wormy smelling turned
and fertile brown earth

I took the day off
from the madness I'd been living
and drove with her in the direction
of those lushly rising
impressive hills.

How separate are the grains
of well cooked rice.

non in coitu solum

. . . .

I wanna clit
and I don't care
where Barnard puts it.

Though I'd like to suggest
the area behind my left ear
so's I can write
and manipulate
at the same time.

Certainly,
there would be lubricating ducts
to keep me wet
and I'd have to wear
a towel about my neck
to stop the stuff
from dripping into my shirt.

. . . .

Two hours later
the leaves are erect
and innocence
is no more.

I withheld water forty days
to see the effect and record
how fast the large leaves rose
after watering.

Aware of what I have done
they chatter from anxiety
and understand that the sun
had become a danger
& the parched earth sucked
instead of giving.

Tomorrow,
I will remove the bent one
to another room
and casually tell the others
that he has gone.

. . . .

Scribe, your eyes are tired.
Rise from the confusion
of sky and God.
Illu, Samu, Kur-Kur.
Kur-Kur, any land but yours.
Ber-Ber barbarian and mountains
descend from the north
where the Snow Troops
breathe
among
the clouds.

Rise from the nature of the cross.
Your short tempered efficiency,
like crustacea,
enfortressed behind a rampart chin.

And I do believe, only now,
that Moses did part The Red Sea
and that after three days
The Christ was risen.

non in coitu solum

. . . .

I'm gonna get

a couple of yards

of clear plastic garden hose

& set up

an external fallopian system.

Maybe

make some of it

internal.

Then,

I'm gonna buy

a farm-fresh egg

and wear long, African dresses

to hide the apparatus

when I get on the bus.

Nine months later

I'm gonna have a baby.

. . . .

days
which weave
as the shuttle cock in the Afghan's hand
passes silk threads through a cotton warp
stirs red unseen before
and more unseen blues

he has
to be imagining the greens
so rich were they
surrounded by sands of ochre hue
and clays in an opium wind

humming his green
into the delicate worm woven web
by the rhythms of his head and hands
the song sits with me
on the mud floor
winds round and round till I can lie upon it
then slips out the door
to join the other gnarled men
walking along the street of their devotion

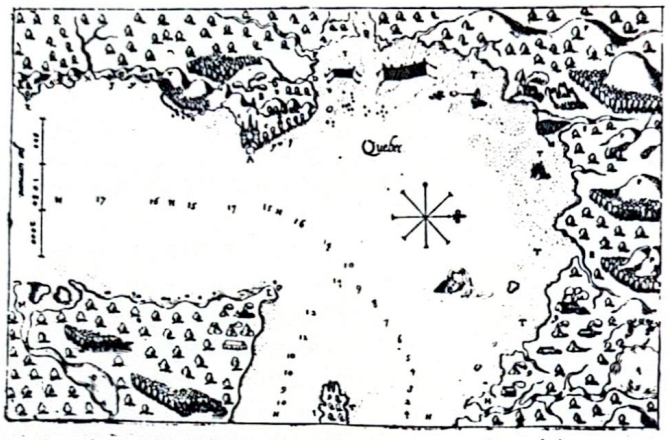
as if weaving were not enough
he has to be reminded
that he is not alone
that he steps where stepped Cyrus
Alexander
Mangu and Thule Khan
that also I was there
and that eight hundred million stand
like fields of Anatolian sunflowers
to pay with time
for the mysteries.

"Happy?
Are you happy, Johnny?
Are you happy?
Are you
happy,
Johnny?
(Hee hee hee hee hee)
Johnny,
you have missus?
No missus!
No missus no good!
Char missus good!
Yak missus no good!
Du missus no good!
Sé missus no good!
Char missus good, good!
(Hee hee hee hee hee)
Yak missus no fucky fucky
du missus
du missus no fucky fucky
sé missus
sé missus no fucky fucky
char missus good, good!"

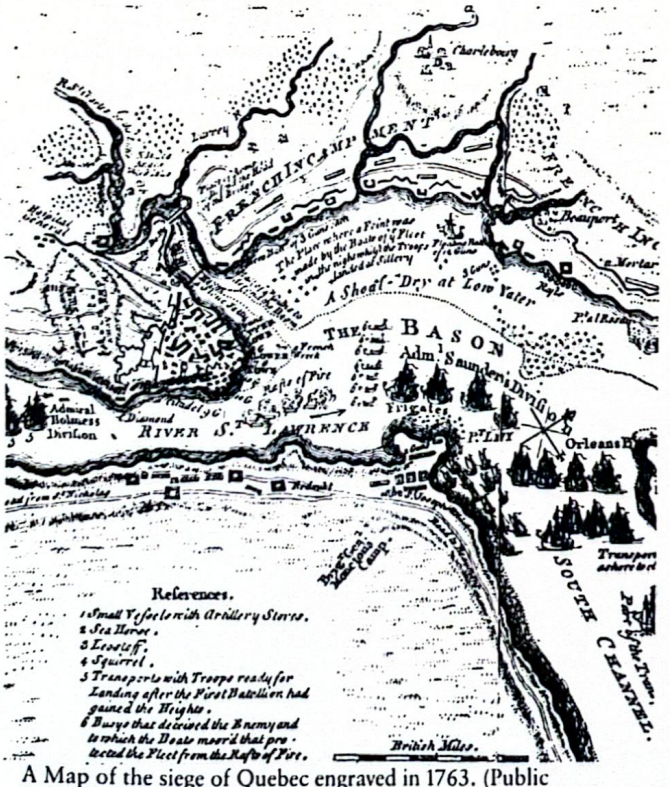
INTRODUCTION

Alan Sondheim

AMERICANS AND OTHERS



Quebec, from Champlain's *Voyages,* Paris, 1632. Champlain, on his second voyage to the St. Lawrence, arrived at Quebec (Cartier's Stadacona) on July 3, 1608. He immediately began construction of a settlement on the point (A on the map), consisting of three two-story buildings. He sowed grains and seed, fortified his habitation, and passed a hard winter there. This map shows the first buildings in the founding of Quebec.



A Map of the siege of Quebec engraved in 1763. (Public Archives of Canada).

During the 1960s I was located primarily in Providence, Rhode Island, with excursions to Jerusalem, Paris, London, and New York. Providence was a reasonable base for someone involved in the arts; it was close to both New York and Boston, and possessed the tail end of a literary culture in the writings of Lovecraft, Poe, and more contemporary distorted imaginations. Providence was Catholic and conservative and perhaps slightly xenophobic; my college years there were relatively placid. Politics, joining SDS or the earlier SPU, striking, protesting Vietnam, etc. was something you *did*—a group of actions in the face of an objectified opposition. These actions created what seems today to be a false sense of community.

During the 1970s my life fragmented; I lived in Providence, London, New York City, Bronxville, Hartford, Halifax, Irvine (California), Ottawa, and in 1980, Montreal, Kingston (Pennsylvania), and Los Angeles. I am now in my 42nd apartment; my private life has been equally chaotic.

Because of all this travelling, because of my ethnicity without foundation, because of my marginal position as a writer and artist, I have become more and more involved in a study of territoriality. In the narrow sense, territoriality refers to a relationship between an individual or community and a geographical territory; in the widest sense, it can be used to refer to any source of identification whatsoever—language, an economic class, a "streetcorner society." During the period I spent in Montreal (visiting Quebec City, Chicoutimi, etc.) I read a great deal about Quebec nationalism; I discussed it; I was swept away by the issues. For me politics was transformed from doing to being—the situation of the exile.

It was the period of the referendum. The Parti Quebecois (PQ) was in power; the referendum, held on May 20th, was ostensibly to decide between a mandate to begin negotiation for sovereignty association (a complex relationship with the rest of Canada involving two independent nations and "peoples") and a mandate to "renew" the federal experiment. The issue is at the heart of Quebec existence. Although most artists and writers supported the OUI position (beginnings of separation), the NON side won, 60% to 40% roughly. People were afraid of losing federal benefits, were afraid of change; the other Quebec nationalities (primarily English, but also Italian, Greek, etc.) were already wary of the imposed language law Bill 101 and its effects on education and culture.

I found myself constantly debating, writing, wavering between the various positions, always of course an outsider reading but not speaking Quebec French, possibly misunderstanding, more and more engaged, personally more and more



Le Canadien, a French-language newspaper, was used by Louis-Joseph Papineau (left) as the organ of the French-Canadian reform party.

LE CANADIEN

NOS INSTITUTIONS, NOTRE LANGUE ET NOS LOIS

troubled. Even in the United States I have felt myself an outsider; here I had the comfort of exile, a comfort I frankly tried to extend, but was unable to, because of problems with work papers. In the writings of Nicole Brossard, Hubert Aquin, and others, there seemed to be both a formal-political sensibility bordering on anxiety, and a sexual tension constantly regenerating itself. I found myself identifying with these concerns, which entered into a series of videotapes, later shown in Montreal and elsewhere in Canada and the United States. I was also writing, trying to grasp, to stabilize, in the sense of the production of a text, these sputterings. My own territory, sexuality, identifications, were shifting (in the sense of a "shift in landscape"); the shift, a kind of mechanism, became the core of an investigation.

This investigation resulted in the creation of a theory of inscription—a theory of the creation and maintenance of social formations, territoriality. The theory is concerned on one hand with the dialectic of the projection of the self within a given culture, and on the other, with shifts in this projection that lead to self-transformations. Between the theory and my own experience, between the establishment of an analytical vocabulary, and an invasion of the body and its categorizations by darkness, a series of correlations developed, a series of texts. The following text, *autrui /*, was one such—"autrui" = "others", those outside the text, those for whom the text became some sort of barrier.

It seems reasonable to me to print *autrui /* in its entirety, but to fill the otherside of the bar "/" with this introduction and a brief gloss, a way in, a trade route.

The Gloss

"...to live as a nation"—Such a phrase implies a totalization of culture in the face of external and internal socio-economic pressure. Objectification and totalization are two characteristics of a culture in a posture of defense. Even to conceive of a "culture"—with its implications of a unitary structuration—is the result of a false consciousness perhaps, a consciousness which is the basis of *autrui /*.

...Montreal is no longer *a city*, but the stirring of an organism... If you live in Quebec, are a writer in Quebec, *the* city is *that* city: Quebec City, with its rural and historic-bureaucratic roots, or Montreal, with its uneasy and suspected internationalist overtones. To write in the city is to write in Montreal; publication in Paris, although a strange sort of foreign (but familial) legitimation is distant and somewhat irrelevant—city fops recognizing the cowboys. Further down in the same section—the same people who vote PQ in the provincial elections return a heavy liberal-federalist vote in the national elections. I understand that now the PQ is in retreat; the independentist section of the party in disarray. And a bit farther down: ...*non* as negativity... The *no* side of the referendum was bureaucratic; the *no* campaign much less noisy, invisible—a sense of intimidation. Everywhere OUI signs—only a few from the opposition. And *non* did not appear, it seemed, as a positivity; the word connoted withdrawal, a deflection. The *oui* headquarters—crying, emotionally charged, no retreat from René Levesque.

...the language in dialectic with the "mother tongue"... Language has been a tremendous issue in Quebec; the local speech (mainly eastern Montreal) is termed *joual*, from the pronunciation of *cheval*, horse. Joual reflects 16th century French roots, as well as English influence (in colloquial, business, and technical terms);it can be considered, on one hand, as the bastard language of the colonialized, and, on the other, as an authentic expression of the Quebec people. In the 60s and 70s, there was considerable debate. More recently, Léandre Bergeron has just published a dictionary "de la langue quebécoise." (See *Le Devoir*, 6/12/80.)

Clark Baise: A Canadian writer, partly raised in Florida, who has written about Quebec among other things.

...the butterfly catastrophe model of acculturation... The butterfly catastrophe is one of seven fundamental forms in catastrophe theory, developed by Thom in France and extended by Zeeman. This model, which I developed in 1979, is an attempt to systematize both developmental parameters and responses in colonializing situations. A culture can withdraw, can die; it can syncretize (Huron) or compartmentalize (Pueblo). The catastrophe model is simply a way of describing some of the more obvious forces at work. Further: ...within the literature... see the writing of Frantz Fanon on the literature of the oppressed.... Brossard... is Nicole Brossard, a leading writer and editor in Quebec; *"E" muet mutant* is a brilliant essay on writing and feminism, the creation of an alternative discourse, the subversion of phallocentric discourse.

The theory of inscription categorizes inscriptions under five headings: impulse (or generation); embodiment (or the mode of existence of the inscription); representation structure (what is represented or articulated); legitimation structure (why the inscription functions as such); and linkage (the internal domain and organization). The ordinary stop-light: The impulse is to control traffic flow; the embodiment is the object itself; the representation structure (signified) is stop/caution/go; the legitimation structure is a body of enforced laws; and the linkage is the electrical network resulting in the demarcated

triad red/yellow/green. Inscriptions such as the stop-light are non-intentional; they need not involve personal identification. Inscriptions shift, are formed into systems, sub-systems, and so forth. The theory of inscription ties into the theory of acculturation.

The Gloss Ends

resulting in the floating, releasing, of *autrui /*. The text was produced partly as a result of the troubles of an exile in the face of a complex and alien political situation; the text itself is troubled. There are, in my work, clearer introductions to inscriptive theory and nationalism—introductions in which the declarative sentence functions smoothly within an acceptable nexus. But the experience of Quebec, for myself, was different; a territory possesses boundaries which may fluctuate or dissolve in a colonial situation—or remain unknown, unknowable to the exile. I'll never behave properly in a tavern or at an ice hockey game or play *king of the rodeo* backstreet Montreal...

What I want to get across, the only thing I'm sure of, is the tremendous amount of objectification that occurs in Quebec; everywhere, the language considered *as such,* the culture defined and redefined, the writers taking *stances* in relation to the language and the nation—these things as a matter of course. Eastern English Canadian poetry tends to deal with personal relationships, nature, and so forth—French poetry deals with alienation and metaphysics based on rupture—a poetry of anguished themes, a poetry with complete seriousness, with no time to lose. For the outsider, this is a kind of absoluteness, centrality, absent in English work. (I must also get across I am writing here as an outsider—and generalizing at that. Quebec literature has gone through a number of what—in NYC poetry parlance—would be called "generations" since 1930 or so, moving from the individual to the community, from metaphysics through anguish/existentialism to formalism and feminism,etc. The literature is enormously more complex per capita [! how could this possibly be measured?] than American writing of the same period...)

Finale

With the expansion of *autrui /*, I am also including two other short pieces of writing, in which fraying, fissures, are developed further: *Second Look* (a reverberation of interpretations closing in on themselves) and *Analysis/Descent* in which the frayed text is transformed into sputtering and sputtering out: "people of his class should never marry. bear children. be in the family way." & note that for most of the world language comes dear, printing is economically almost impossible to afford, and a letter may cost a life—things do sputter, fray, fall apart; we'd never know this, would we? staying within our borders, exporting guns and entertainment.

Alan Sondheim 12/80

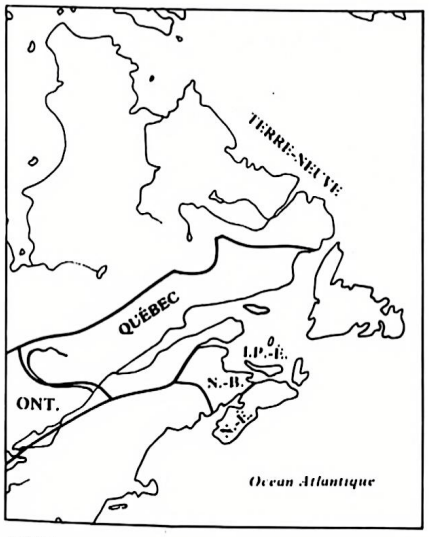
autrui /

"A nation is a cooperative project, a continuous product of our concerted efforts.... It is a tremendous task to live as a nation; it involves an extremely intricate orchestration invisibly scored by the common conviction that the nation exists, that it has a place in history, that care must be taken to see that the sense of unity does not wane, and that all of these things are synonymous with freedom, democracy, social justice and humanity. The most serious threat to a nation is not its total destruction by war; it is its own indifference to the shape of its future." (Pierre Emmanuel, "Pour une politique de la culture," quoted in Foreward to *A Cultural Development Policy for Quebec,* 1978.)

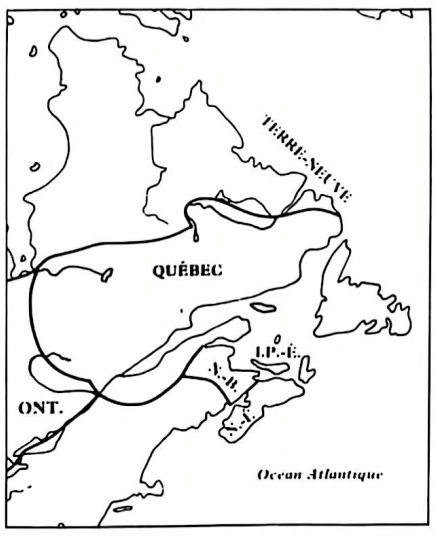
The nation is the inscription of history, a *place* in history, a condensation: a barrier, a differentiation of circulation: membrane

...a body of people bound together by a uniform code of laws, a currency, diplomatic front... (langue)
...defined in terms of the perception of the projection of the Other's structure: *they* are organized, *they* expand, even *here:* a projection whose correlate—the organization—varies—an unsteady image, different ontology
...colonialization—invasion of the Other, viral, its horizon the "mother country" a *spawn*
...inverted into racism, the localization of inscription, the antisemite...

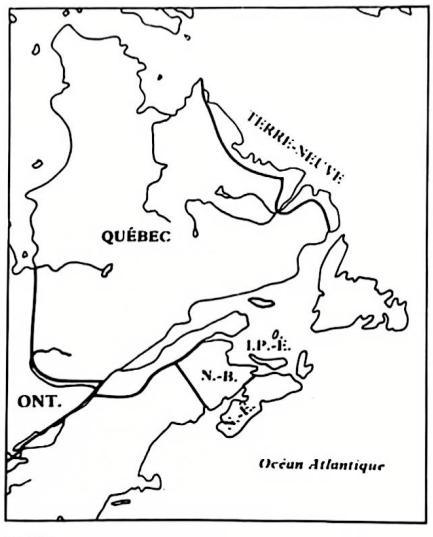
[it turns in, fingers claw: between the legs across the belly against the breasts a topography of culture / continuous pressure out there: the mother the country. magazines. phone calls.]



1867



1898



1912

THE NATION creates a different phenomenology, mode of existence, in which Montreal is no longer *a city,* but the stirring of an organism, i.e. the land: a condensation, the fulfillment of a quality of breath, i.e. it's raining out, it's raining on the earth... an upheaval, the sense that culture is *inscribed,*

contradictions—the totalization of contradictions... the popularity of the liberals, heavy OUI vote in the referendum. it's the problem of the desk, the hand reaching across, pen removed from holder, i.e. a document to be signed, the typewriter, other machinery (and in the back rooms etc.)

non as negativity, a denial of... an *ontology.* the issue changed from quiet / terrorism / bureaucratization / ontology: the *quality* of the place (which is no longer a city) which denies itself (which carries its own location), still there are marginal definitions, *blessure,* a wound

the *phallocentric* model, the language in dialectic with the "mother tongue" those jargon, argot, pidgin, creole: localizations, currents, fraying.

the language in *resonance* with the land, cultural tremor: through history, the inscription of the earth, a history of *autrui,* colonialization (i.e. regulated economy, quantification: the birth of the *native,* the perception of exoticism, sexuality, everywhere a *betrayal*)

the *fecundity* of the land, the feminine bearing itself (and in the texts, a splitting, fraying, series of ruptures, dishevelings, the streams, water tables flattening down, a subversion of the *enterprise:* the impotent phallus with its fear turned toward strength, terrorism, abandonment, screaming in the Other in the absence of the Other in the Other in the)

closed within the distinctions of religions, familial relations, the village, the local system of hearsay, rumors, nuances (in a Clark Blaise book, the character speaks of mistaking nuance for nature, vice versa)

vis a vis the colonialist, the land is input, output, an economics, parameterized productivity

the dual resonance of the colonized and colonialist, meshing projections and introjections as long as the system functions. at least *there* in the factories, *there* in the centers of production

: the colony holds on : objectifies its culture : a *policy* is


LA PRESSE

POUR FAIRE SORTIR QUEBEC DE LA CONFEDERATION CANADIENNE

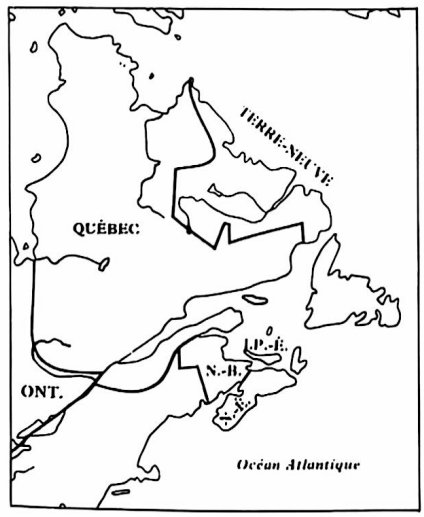
LES ANTICONSCRIPTIONNISTES AUSTRALIENS ONT DEJA OBTENU UNE MAJORITE DE 150,000 VOIX

LE RAPPORT DE LA COMMISSION DES TRAMWAYS

ARRESTATION DE 150 AGITATEURS

HERTLING A L'AUTORISATION DE CONCLURE LA PAIX

UNE GRANDE FOULE AU MARCHE DE NOEL



The evolution of the borders of Quebec, 1867-1927.

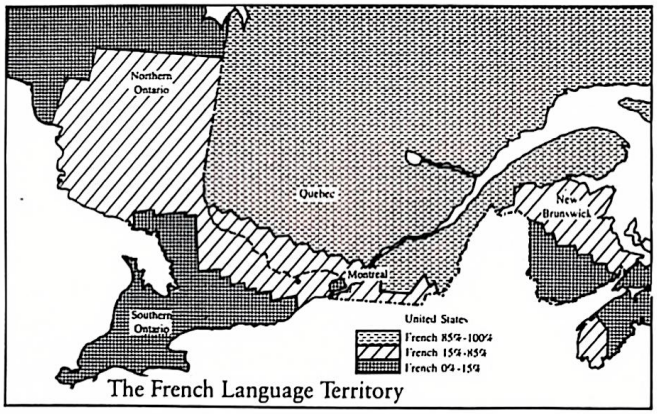
1927

Real income of the family, household or single individual	*Proportion of the population in the category*	*Main characteristics of the category*
$100,000 and more	3%	90% English-speaking: large industrialists, financiers and merchants
$20,000 to $100,000	12%	40% English-speaking and 50% bilingual: managers, professionals, businessmen
$7000 to $20,000	30%	20% English-speaking, 20% bilingual and 60% French-speaking: smaller professionals, organized workers, large farmers
$4000 to $7000	35%	5% English-speaking, 30% bilingual and 65% French-speaking: unorganized workers, small farmers
$4000 and less	20%	95% French-speaking: unemployed, welfare recipients, students, pensioners

An Illustration of Income Distribution in Quebec Households, 1976. Source: Adaptation, for 1976, of an illustration in Pierre Jauvin, *Le Sous-developpement au Ouebec et dans le monde* (Montreal: Secretariat national de la Jeunesse ouvriere catholique, 1971). Note: Pierre Jauvin's table is in turn inspired by a 1969 report of the Quebec Department of Revenue. Income includes capital gains registered in the course of the year.



The occasion of the publication of the *Quebecois Party Manifesto*. René Levesque is seated next to Jacques Parizeau (responsible for the economics section of the *Manifesto)* and Claude Laurin, Chief of the parliamentary wing.



The French Language Territory

ENOUGH, MR. LEVESQUE!

You are about to pass legislation which will be seen as regressive and discriminatory. And we know why. You're trying to scare us out. Why else would anyone propose a language policy like yours?

Well, Mr. Levesque, your tactic almost worked. But consider this: We have stopped running.

We are staying in Canada. What's more, as long as this remains a democratic society, we demand that our rights, including all rights of language use, be protected. We demand it for ourselves, our children and for the conduct of business.

Pursue your dream, Mr. Levesque, and we will pursue ours – a Quebec based on respect for human rights. West Quebec, Canada. The eleventh province.

Note to all Quebecers: We need your time and your money, your hands and your hearts. Please direct your enquiries, and send your contributions to:

THE PREPARATORY COMMITTEE FOR AN 11th PROVINCE

P.O. Box 998, Station H, Montreal, H3G 2M9.

Source: *The Montreal Star,* April 30, 1977.

developed in which the culture is divided; the *chapter titles* from *A Cultural Development...:*

Toward a Québec policy on cultural development
A French tradition in Québec: the cornerstone of cultural development
Québec culture: the minorities*
Diversity of region and social class
Sex and age
A comprehensive policy
Habitat, health and culture
Leisure
Work and culture
Communications
Freedom of information and the government
Developing a policy on scientific research
Arts and letters
The situation of the cultural industries
The cultural industries and the government
Our heritage
Propagation of creative activity
The educational reform of the 1960s and cultural development in Québec
Pressing problems
A revival in education
Conclusion

*Beginning with "There can be no culture without minorities and Québec is no exception," which again implies a totalization given the *fundamental* distinction between Québec and the rest.

(Within the butterfly catastrophe model of acculturation, this objectification is all that can remain, given a situation of oppression; the continuum of closure [if it ever existed at all] is destroyed.)

Within the literature, the men resonate, act, turn inward, the body a sheet of destroyed/destruction; the women are seen as earth, scattered libido. Within the literature, the women fray, immerse emerge, to one other, that level of authentic communication in which men are superstructure, phallocentric. & then in reversal, as positions become formulated, the men uncertain, women identified

holding the key to the codes. the dissolution of the codes. the representations structure, legitimation structure, of the emerging discourses. Brossard, from *"E" muet mutant,* translated by M.L. Taylor:

"Speech made up of little stories, subordinated to history. Because woman never acquires enough possessions—even her children aren't in her name—and information to enter into the progression of history and participate in it. A beast of prey, she never grasps any prey." *Nation* is never questioned; there is no time, no perspective. Given the technological state, etc. given the economic, etc. given the necessity for transportation, etc. the organization of millions, etc.

nation defined agaist the fragmented Other: null, ø, cipher: that which confines, oppresses, against the music of the anthem. the collectivity of the nation appears when the stranger enters the village.

within the *theory of inscription,* the inscription of "national aspirations" might appear as follows:

the *impulse* of the inscription is economic/distinction of the Other/displacement/massification ("screen-jectivity"):

condensations of claims . . . the total impulse is the goal of ontological re-equilibration.

the *embodiment* of the inscription: cultural artifacts (within a theory of representationalism teleologically oriented), speech acts (the argument, gesture, graffiti, radio show), the body (rallies, discourse of sexuality).

the *representation structure* on a continuum from quantification (economy, production, population, wealth) through symbolization (history/temporality, symbolic geography/spatiality)—the appearance of *historical figures, peoples, masterpieces, class, redistributions*, condensation and displacements, metaphors and metonomys, the circulation of languages, chatterings, structure, articulation, ideology.

the *legitimation structure:* use of historical models, the violent action with nothing to lose (individuation in the name of collectivity) (the margin), the gathering, a culture of memory and disparity.

the *linkage:* cultural-economic flow within the territory, described by Fanon and others.

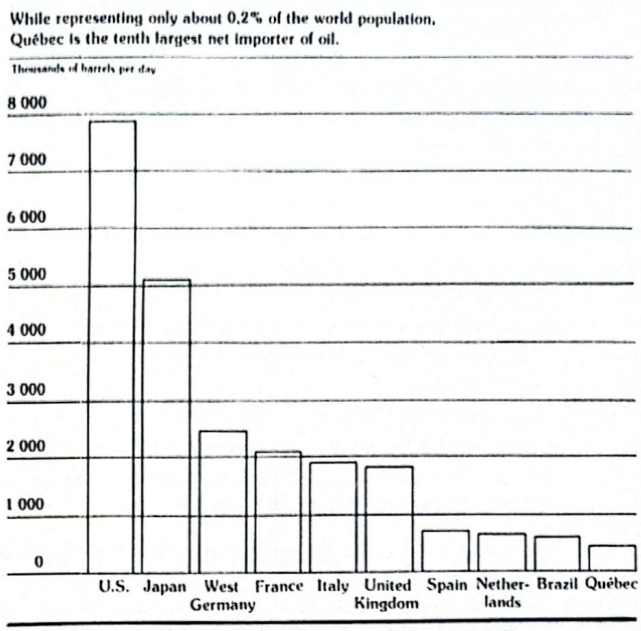
-a *nation*, accepted as natural, the boundary of culture, cultural goods, the language as articulation of being. (I move slowly, external to this invasion, lacking the qualifications of speech, a pedigree of identification. Each stage is intellectualized, a trace or network: decisions branching into dense foliage, abyss of the alien. Châtrer, castrate. What eats away literally invades the body ego, the flow of desire, potency. The remoteness of objects everywhere. Recession of light, walls, night. Semblance of schizophrenia. Not much time, shouts in the streets. Sirens (there's still *electrification*, a work almost always coupled with *rural*), footsteps. Night, and still some. Or darkened days as the referendum, this *instance*, approaches. Decisions made by the city, made by the country. Land swollen with rain. Everywhere a quality which compresses and is elsewhere. The *lung* of it. Frozen in the moment of ejaculation. Spent words. Bureaucracy. The hand moving slowly across the desk. a group of men. or a streetcorner. a group of women. or a pedestrian. they are walking. the light has turned, green, now that's it, something in there to be seen: a light the color of a meadow. more blue, i.e. something borrowed from the daytime sky. as if the specifics of narration alter a situation. arousal. alone, fingers tighten. the text flows out from the bottom, everything is covered, everything a mess . . .

Second Look

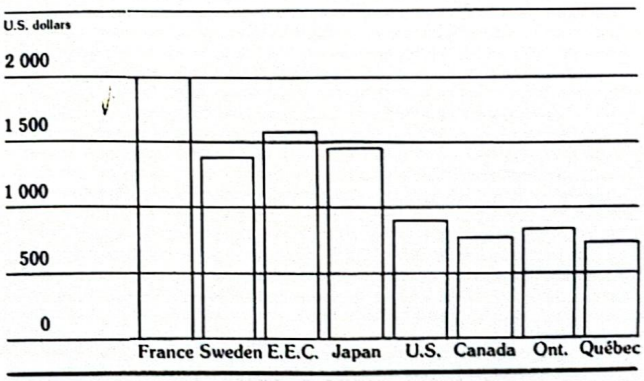
Difficult to comprehend a situation in which everything depends on interpretation. The meaning of *x* in the path of a steep defile shadowing. Between an oasis of formal structure, underlying *ratio A*, and fissure, a spherical shell with the distribution of an explosion temporally fixed, fraying: resting *its* case on a poetics of language and intent *B*.

"*its*", a slower movement of conventions upon a surface, a distribution culturally ordered.

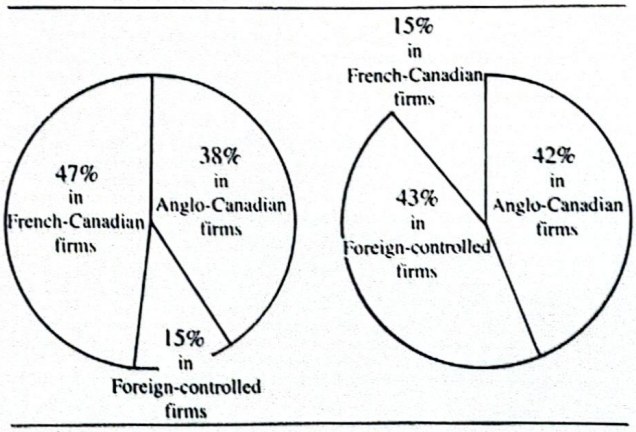
[a certain *notion of the text* so common now with its emphasis on *those objects, those qualities*, as if they totalized the inherent realm of inscription: paper, pen, typewriter, the text before me, etc. the desk upon which I write, etc. the reading of the writer, of the reader, etc.—a plethora of etcs. and so forths. gestures of



The ten largest net importers of oil in 1975. Source: International Petroleum Encyclopedia, 1976.



Gross domestic product per ton of petroleum equivalent—1975. Source: OECD Observer, May 1977.



Distribution of Quebec private sector employment and generated value-added, to the language and residence of firm owners, mid 1970's. Source: Quebec Department of Industry and Commerce.

withdrawal, theoretical closure, leave it within the bracket]

nothing satisfies. The body subjected to alternating torque. (Of equal power? Of a *distributed* intensity.)

a certain sort of satisfaction, mistaken fetishized belief that one is writing for one's life.

A (now) (now A): placing oneself at the mercy of the kernel of the text.
—*that* kernel impervious to the form of its expression
—pure translatability

B (now) (now *B* now): each word a hinge, permanent location, vulnerable to its placement on the page (in the text) (that certain *notion* formulated as the displaced margin of the culture: to its interior).
—flow of meaning, dependent eddies.
—*leather.*

"in which everything becomes"—conditions of neutrality, an appearance of A *for all,* a function of transformation. AA, A"A"...for all, giving the meaning to each of them as it would have been found.

Fr. "If it could have been going to have been becoming to have been

Lat. going to be, it would have had been beginning to have been

Eng. becoming a language, or stretch."

Analysis/Descent

The *transitivity* of the photograph: I photograph myself. X. "Maurice Côté dit que = les Montréalais disent que = /.../." secondary knowledge, formulation and articulation:

A. *They* discovered a new particle recently.
B. I have to look it up.
B. The information is here.
B. At my fingertips.
B. Just a second.

— Crossed phalluses. X. The divison of time within the image. (I am here. I am there.)
— Frayed, split by solarization—the repression of the foreground, a cancellation. (Look at yourself! How dare you!) Lack.
The body locking horns.
— "contenant et contenu sont identiques"
— "L'identification inconsciente du corps propre au phallus

EG202 FEDERAL-PROVINCIAL RELATIONS - CONSTITUTION- QUEBEC PROPOSALS
R CZBBYLCZCBYL
313

PM-CONST-QUEBEC; DL BGT
DAY LEAD ROUNDUP 450 BUDGET

MONTREAL (CP) - PREMIER RENE LEVESQUE SAID THURSDAY THE NEW CONSTITUTION IS A DANGER TO THE QUEBEC ''NATION'' THAT CAN ONLY BE ANSWERED BY SEPARATING FROM CANADA.

AS QUEEN ELIZABETH BEGAN HER FOUR-DAY VISIT BUILT AROUND SATURDAY'S PROCLAMATION CEREMONIES IN OTTAWA; LEVESQUE SAID THE CONSTITUTION'S AIM WAS TO MAKE QUEBEC WEAKER THAN EVER.

IN OTTAWA; THE QUEEN TOLD CLAUDE PAPINEAU; A REPORTER FOR LA PRESSE CANADIENNE; THE FRENCH-LANGUAGE ARM OF THE CANADIAN PRESS; THAT QUEBEC'S ISOLATION WAS SAD.

BUT SHE ADDED: ''I HOPE IT (THE CONSTITUTION) WILL BE GOOD FOR ALL CANADA.''

IN A SPECIAL HALF-HOUR BROADCAST ON THE TVA FRENCH-LANGUAGE TELEVISION NETWORK; LEVESQUE USED COLOR SLIDES; A FELT MARKER AND BOARD AND FLASHES OF SENSATIONAL HEADLINES TO TELL QUEBECERS THE FEDERAL GOVERNMENT IS TRYING TO MAKE QUEBEC ''ANOTHER PROVINCE LIKE THE OTHERS.''

CALLS IT SOPORIFIC

HE SAID THE DOCUMENT IS ''THE MOST SOPORIFIC LAWYERISHNESS YOU COULD FIND ANYWHERE IN THE WORLD.''

THE CONSTITUTIONAL ACCORD REACHED LAST NOVEMBER BETWEEN THE OTHER NINE PROVINCES AND OTTAWA WOULD ONLY ''SERVE TO SYSTEMATICALLY FURTHER ISOLATE THIS NATION (QUEBEC).''

''PATRIATION IS NOTHING BUT A MASK TO DISGUISE THE REAL FACE; THE REAL INTENTIONS'' OF THE CONSTITUTIONAL CHANGES.

LEVESQUE SAID THE NEW CONSTITUTION WILL REACTIVATE THE PROVINCE'S ''CULTURAL INSECURITY'' BY ENLARGING ACCESS TO ENGLISH SCHOOLS AND WILL TAMPER WITH QUEBEC'S EXCLUSIVE RIGHT TO LEGISLATE ON EDUCATION.

HE SAID LEGISLATION ''TO REPAIR THE DAMAGES'' WOULD BE PRESENTED TO THE NATIONAL ASSEMBLY WHEN IT RECONVENES; BUT DID NOT ELABORATE.

'HOLD HER NOSE'

LEVESQUE RECALLED A SUGGESTION BY TRUDEAU TO BRITISH PARLIAMENTARIANS THAT THEY SHOULD HOLD THEIR NOSES AND PASS THE CONSTITUTIONAL PACKAGE WHEN IT ARRIVED IN LONDON FOR APPROVAL.

''PERHAPS THE QUEEN WILL BE DOING THE SAME THING ON SATURDAY;'' LEVESQUE SAID.

ALTHOUGH HALF OF THE 41 MEMBERS OF THE LIBERAL OPPOSITION IN QUEBEC ARE EXPECTED TO ATTEND A GALA BALL IN OTTAWA TO MARK THE PROCLAMATION CEREMONIES; PARTY LEADER CLAUDE RYAN REITERATED HIS DECISION NOT TO ATTEND AND SAID ''NO CONSTITUTIONAL PLAN CAN BE TRULY CANADIAN IF QUEBEC IS NOT PRESENT.''

RYAN TOLD A NEWS CONFERENCE THAT A MAJOR SCHISM COULD DEVELOP IN THE PROVINCIAL LIBERAL CAUCUS IF ANY OF ITS MEMBERS PUBLICLY DENOUNCE HIS STAND AGAINST PARTICIPATING IN THE CEREMONIES.

LEVESQUE AND HIS CABINET MINISTERS ARE TO PARTICIPATE IN A PROTEST MARCH IN MONTREAL ON SATURDAY; SHORTLY AFTER THE QUEEN PROCLAIMS THE NEW CONSTITUTION. PARTI QUEBECOIS ORGANIZERS EXPECT AT LEAST 20;000 PERSONS AT THE MARCH.

16-04-82 01.51ES

EG193
R CZBZXTITCZYR
834

PM-QUEEN; 1ST ADD DL BGT
OTTAWA - 1ST ADD-833. . .HELL.''

THE CEREMONY - GIVING CANADA SOLE AUTHORITY OVER ITS OWN CONSTITUTION 115 YEARS AFTER CONFEDERATION AND ADDING A CHARTER OF RIGHTS AND FREEDOMS - IS ONLY HOURS AWAY. THE QUEEN WILL SIGN THE CONSTITUTION INTO LAW SHORTLY BEFORE NOON SATURDAY.

WEATHER PERMITTING - THE FORECAST CALLS FOR SHOWERS - THE NATIONALLY-TELEVISED CEREMONY WILL BE HELD ON THE FRONT LAWN OF PARLIAMENT HILL BEFORE WHAT ORGANIZERS HOPE WILL BE TENS OF THOUSANDS OF PEOPLE. OTHERWISE; IT WILL BE HELD IN THE SENATE.

TONIGHT THE QUEEN; JOINED BY THE LATE-ARRIVING PRINCE PHILIP; ATTENDS A GALA PERFORMANCE AT THE NATIONAL ARTS CENTRE; FOLLOWED BY A DINNER AT A DOWNTOWN HOTEL FOR ''YOUNG CANADIAN ACHIEVERS'' SELECTED BY MEMBERS OF PARLIAMENT.

THE QUEEN; ARRIVING RIGHT ON SCHEDULE AT 3:01 P.M. EST; WAS GREETED BY SCHREYER AND A BEAMING TRUDEAU AS MAPLE LEAF FLAGS AND BRITISH UNION JACKS SNAPPED SHARTLY IN THE WARM SPRING BREEZE.

ABOUT 400 DIGNATARIES; SPECTATORS AND FLAG-WAVING CHILDREN WERE ON HAND FOR THE BRIEF ARRIVAL CEREMONY; WHICH INCLUDED EVERYTHING FROM A 21-GUN SALUTE TO GOD SAVE THE QUEEN.

TRUDEAU; SPORTING HIS USUAL RED ROSE; INTRODUCED THE QUEEN TO DIGNITARIES INCLUDING CHIEF JUSTICE BORA LASKIN OF THE SUPREME COURT OF CANADA AND FORMER GOVERNOR GENERAL ROLAND MICHENER.

KELLY DAVISON; A NINE-YEAR-OLD GRADE FOUR STUDENT FROM NEARBY HARRINGTON; QUE.; PRESENTED THE MONARCH WITH A BOUQUET OF YELLOW ROSES AND THEN BURST INTO TEARS.

HER MOTHER SAID THE EXCITEMENT AND LONG WAIT WERE TOO MUCH FOR KELLY.

16-04-82 00.11ES

EG100
B CZBZXTCZCCZC
994

AM-PQ-MARCH; 1ST ADD BGT
MONTREAL 1ST ADD 983 . . . FOREHEAD

AS THE PARADE NEARED MOUNT ROYAL MARCHERS BEGAN CHANTING ''TRUDEAU TO THE STAKE'' AND ''QUEBEC FOR QUEBECERS;'' FAMILIAR RALLYING CRIES OF THE PROVINCE'S NATIONALISTS.

ONE BYSTANDER WHO CALLED OUT; ''VIVE LE CANADA;'' WAS QUICKLY DROWNED OUT BY SHOUTS OF ''VIVE LE QUEBEC.''

AFTER THE MARCH; ENVIRONMENT MINISTER MARCEL LEGER SAID HE WAS PLEASED WITH THE TURNOUT; ''WHICH SHOWS QUEBECERS DON'T ACCEPT THE (CURRENT) SYSTEM.''

''WHILE ENGLISH-CANADA IS CELEBRATING OVER THERE (IN OTTAWA) AND QUEBEC'S POWER HAS BEEN DIMINISHED; IT SHOWS THAT IT'S NOT OUR CONSTITUTION AND THE WAY NOW IS TO DETERMINE OUR OWN FUTURE AND ACHIEVE INDEPENDENCE.''

SOVEREIGNTY CAMPAIGN

LEGER NOTED THAT THE PQ PLANS TO CAMPAIGN ON SOVEREIGNTY IN THE NEXT PROVINCIAL ELECTION; BUT THAT WON'T BE CALLED UNTIL AFTER THE NEXT FEDERAL ELECTION. PQ SUPPORTERS EXPECT PRIME MINISTER TRUDEAU'S LIBERALS WILL BE DEFEATED IN THAT VOTE.

ELSEWHERE; THE PQ ORGANIZED MOTORCADES IN SEVERAL MUNICIPALITIES

Press Releases

devient ainsi évidente (se supprimer = se châtrer), en même temps que l'interdiction d'être un corps autonome en dehors de la relation fusionnelle. 'Exister, dit-il, c'est avoir un corps séparé. Ne pas exister, c'est disparaître en autrui.' " (Sami-Ali, de la projection, un etude psychanalytique)

The body protrudes into vacuity (defined by that projection), an undercoded fabric (space) possessing a coherent texture (emptiness). Coherent, since nothing is interpretable in exile, everything is anomaly and the same. The lacunae of names which vanish, marginal, peripheral. Placed/in place at the centre blanc as victim. No withdrawal.

— This existential *state* which crystallizes around visa, permits, customs, exchange rates. Everything played out (splayed)
against this recessive/massive background of legalization. Everything open to misinterpretation.

empêcher: prevent, impede, hamper, refrain. (images holding back from within the projected situation.————

Here, at this point, line, bar, dash, that my life has altered, a hesitation, pause, break ("in the " "text" " itself"), in which that *noir* has crystallized ("see "Stendhal" "), an emptied field of kinetic action, those coordinates of distortion, neurosis, which float, seamless, empêcher every location / into that

stage where the text goes/gaps, the abandoned sente/nce, extension to the bottom, edge, margin (a defense) carri/ed over (as if) (or), series of juctures, jectivities I r/emember crying out late at night I've had nothing but losses, when will it end & there was no answer she could give (played out against, etc.) & it was cold in the room, walls receding into shadows, I still didn't know how to answer goodbyes (say them myself) why nothing worked the way I learned it should (pro-grams coming and going things involved (tv & radio bringing, nothing more than the RESOLUTION BRACKET you go on go on) there's another; end and he tried reading the *childish scrawl* promising to type it over (itself), letters aligned, identical, deciphering of gesture,

tired and not so much, people of his class should never marry. bear children. be in the family way.

IN THE EASTERN PART OF THE PROVINCE.

SOLANGE CHAREST, A PQ OFFICIAL IN RIMOUSKI, CALLED THE PROTEST THERE A SUCCESS, ALTHOUGH SHE ADDED THAT ORGANIZERS BACKED DOWN AT THE LAST MINUTE TO SYMBOLICALLY LOWER THE CANADIAN FLAG AND RAISE A QUEBEC ONE INSTEAD.

''WE JUST RAISED THE QUEBEC FLAG,'' SHE SAID. ''WE WANTED TO BE POSITIVE.''

18-04-82 15.11ES

EG191 FEDERAL-PROVINCIAL RELATIO
R CZBZXTIYCZAT CONSTITUTION-QUEBEC PR
833

PM-QUEEN, DL BGT
DAY LEAD 600 BUDGET
BY EDISON STEWART

OTTAWA (CP) - QUEEN ELIZABETH SAID THURSDAY ''IT IS SAD'' LAST YEAR'S CONSTITUTIONAL ACCORD DOESN'T INCLUDE QUEBEC BUT SHE HOPES THE CONSTITUTION ''WILL BE GOOD FOR ALL OF CANADA.''

SHE MADE THE COMMENT AT A RECEPTION FOR MORE THAN 100 REPORTERS A FEW HOURS AFTER HER CANADIAN FORCES BOEING 707 TOUCHED DOWN HERE TO OPEN A FOUR-DAY VISIT THAT WILL CLIMAX SATURDAY WITH PATRIATION OF THE CONSTITUTION WITH A CHARTER OF RIGHTS.

REPORTERS WERE TOLD BEFORE THE 45-MINUTE SESSION THAT THE QUEEN'S REMARKS WERE OFF THE RECORD BUT CLAUDE PAPINEAU, A REPORTER FOR THE FRENCH-LANGUAGE SERVICE OF THE CANADIAN PRESS AND PRESIDENT OF THE PARLIAMENTARY PRESS GALLERY, SAID HE DID NOT HEAR THE REQUEST AND REPORTED HIS BRIEF CONVERSATION WITH HER.

GOV. GEN. ED SCHREYER HAS ALREADY SAID HE REGRETS THE CONSTITUTIONAL AGREEMENT DOESN'T INCLUDE QUEBEC BUT HE ALSO BELIEVES THE ACCORD IS GOOD FOR THE NATION.

MEANWHILE, BOTH PRIME MINISTER TRUDEAU AND QUEBEC PREMIER RENE LEVESQUE TOOK TO THE AIRWAVES TO RENEW THEIR RUNNING FEUD OVER THE ISSUE.

LEVESQUE, SPEAKING ON A 30-MINUTE FREE-TIME BROADCAST ON THE TVA TELEVISION NETWORK IN QUEBEC, DENOUNCED THE CONSTITUTION AS ''ABSOLUTELY UNACCEPTABLE'' AND AN ATTACK ON THE POWERS OF QUEBEC. HE SAID INDEPENDENCE IS THE ONLY WAY OUT.

TRUDEAU, SPEAKING IN A CBC TELEVISION INTERVIEW FOR BROADCAST TONIGHT, SAID HE IS DISAPPOINTED HE HASN'T HAD MORE SUPPORT FROM QUEBEC ''BUT I HAVE NOT THE SLIGHTEST FEAR THAT THE PEOPLE OF QUEBEC COLLECTIVELY WOULD VIEW THIS AS SOMETHING BAD FOR THEM.''

WOULD SKIP CEREMONY

JUSTICE MINISTER JEAN CHRETIEN ADDED HE IS WILLING TO SKIP SATURDAY'S PARTIATION CEREMONY IF LEVESQUE WILL REOPEN NEGOTIATIONS RIGHT AWAY. BUT HE SAID LEVESQUE DOESN'T WANT TO NEGOTIATE BECAUSE HE COULD END UP AS A ''FATHER OF CONFEDERATION.''

AND IN FREDERICTON, NEW BRUNSWICK PREMIER RICHARD HATFIELD WAS BURSTING WITH ENTHUSIASM FOR SATURDAY'S CEREMONIES.

''I CAN HARDLY WAIT. I'M VERY EXCITED ABOUT IT AND I THINK IT IS GOING TO CREATE A GREAT DEAL OF EXCITEMENT AMONG THE PEOPLE OF THIS COUNTRY AS WELL.''

MORE LATER

16-04-82 00.03ES

EG099 FEDERAL-PROVINCIAL RELATIONS-
D CZBCZCIYCIYC CONSTITUTION-QUEBEC PROPOSALS
983

AM-PQ-MARCH, BGT
BUDGET 600-SEE VARS MTL LASERPHOTOS
BY DAVID LORD

MONTREAL (CP) - ''OUR PRESENCE HERE SPEAKS FOR QUEBEC,'' PREMIER RENE LEVESQUE TOLD MORE THAN 20,000 CHEERING OPPONENTS OF THE NEW CONSTITUTION AFTER A NOISY BUT PEACEFUL PROTEST MARCH THROUGH CENTRAL MONTREAL SATURDAY.

EARLIER, LEVESQUE, HIS CABINET, LABOR LEADERS AND REPRESENTATIVES OF QUEBEC NATIONALIST ORGANIZATIONS LED THE FLAG-WAVING AND CHANTING CROWD ABOUT 1½ KILOMETRES FROM AN EAST-END PARK TO THE SLOPES OF MOUNT ROYAL.

POLICE ESTIMATED THAT BETWEEN 20,000 AND 25,000 MARCHERS JOINED THE PARTI QUEBECOIS-SPONSORED MARCH, CALLED TO COINCIDE WITH THE PROCLAMATION OF THE CONSTITUTION IN OTTAWA BY THE QUEEN.

THE OTTAWA CEREMONIES DREW AN ESTIMATED 30,000 SPECTATORS.

FROM A MAKESHIFT STAGE DECKED IN QUEBEC'S BLUE AND WHITE FLEUR-DE-LIS FLAG, LEVESQUE SHOUTED: ''WHAT WE'RE HEARING HERE IS A CRY OF REFUSAL AND A CRY OF CONFIDENCE AT THE SAME TIME.''

LEVESQUE SAID THE MONTREAL PROTEST WOULD BE HEARD IN OTTAWA, LONDON AND AROUND THE WORLD.

''EVERYONE HAS THEIR PROCLAMATION AND WHAT WE'RE PROCLAIMING HERE IS THAT THIS HORROR OF A CONSTITUTION WAS MADE WITHOUT US, AGAINST US, BEHIND OUR BACKS AND IS NOT OURS.''

MARCHERS SOAKED

A 15-MINUTE CLOUDBURST SOAKED THE MARCHERS AS THEY TRAMPED ALONG RACHEL STREET FROM EAST-END LAFONTAINE PARK BEHIND A WALL OF QUEBEC FLAGS. LEVESQUE WAS IN THE FRONT RANKS, ARM-IN-ARM WITH HIS WIFE, CORINNE COTE-LEVESQUE.

A LIGHT PLANE TRAILING A BANNER READING, ''P.Q. LOST OUR VETO RIGHT. IT MUST GO,'' DREW BOOS FROM THE CROWD AS IT PASSED OVER THE PARADE ROUTE.

THE ANONYMOUS STATEMENT REFERRED TO LEVESQUE'S SURRENDER OF QUEBEC'S TRADITIONAL VETO OVER CONSTITUTIONAL CHANGE BEFORE LAST NOVEMBER'S AGREEMENT BETWEEN OTTAWA AND THE NINE OTHER PROVINCES.

IN HIS BRIEF SPEECH, LEVESQUE TOLD THE CROWD: ''IT'S NOT A PARTY, BUT A PEOPLE THAT HAS TO START MARCHING. I'M MORE SURE THAN EVER THAT WE'LL HAVE TO MAKE THE PLACE THAT'S OUR DUE AS A PEOPLE. . . WITHOUT HOSTILITY TOWARD ANYONE, IN FRIENDSHIP. . . BY TAKING BACK ALL THE INSTRUMENTS THAT SHOULD BELONG TO US.''

THE NEW CONSTITUTION WAS MADE FOR A COUNTRY ''IN WHICH OUR PLACE WILL BE MORE AND MORE REDUCED, MORE AND MORE DEPENDENT, A COLONY BETTER BOUND THAN EVER. THAT PLACE WE REFUSE AND WILL ALWAYS REFUSE.

'HISTORIC CHANCE'

''THE INSULT THAT IS BEING INFLICTED ON US IS AN HISTORIC CHANCE. WE MUST START AGAIN FROM HERE. THE LOWEST POINT IN OUR HISTORY OF COLONIZATION IS THE BEGINNING OF THE END OF THIS PREHISTORY.''

DESPITE THE RAIN AND LEVESQUE'S SOMBRE MESSAGE, THE MARCHERS SANG AND BRANDISHED THOUSANDS OF QUEBEC FLAGS, BANNERS AND STICKERS. OTHERS WORE FLAGS STUCK IN BASEBALL CAPS OR AS CAPES. ONE PARTICIPANT HAD DAUBED A BLUE FLEUR-DE-LIS ON HIS FOREHEAD.

MORE

18-04-82 15.07ES

Jim Krell

from *SPAR*

Quick,
you felt from this

THE APRIL pool
THE GOD
laps from

the running un-in
TO TRY TO PUT
THROUGH THE SPUTTERING RADIO
MESSAGES
TO THE UNCOMPROMISED
MOTHERLAND

guns and their endproducts
have spread to Jersey

heaven

rubber

for
the

futura

of this bending
ANGEL'S TITS

HIS INDUSTRY IN SMELTING THESE
ENCOURAGING

volumes

59
69
the
female
cognitive
I
can't
wait

cause
there
was
cause
to
love
your

good

"GOLDEN LIGHT FILLS THE
VOID"
cause they
can't
stop Hank's
nose
from
BLEED-ING
all the amber hoses

JUST WON'T HEAL
and forget it again
NAH THIS TIME
all the way

IT'S MY AUTHORITY GOT IT

sanity don't make shit

A.

(to Jack Spicer)

there is the trinity on
a cenotaph

"indicating the nature of something perceived"

this becomes an edge

TO THEM who are trying out new freedoms
there is a wish for more than cold beers
GREATER THAN EXTRA INNINGS

COMPELLED
nembutal
to stimulate

(sine and cosine)
the culm of grass

that escape mental damage

B.

WHEN TIMES
time comes to
SUGAR RAY MAYO

the hands hold on
to hold out

so the low lowered

GOD ALMIGHTY
I'M BLUE

JUST A GOOD NIGHT'S SLEEP
FOR MY ASS

the cops come up on you
and you shot yourself
off the side of a busy highway

for art
FOR WORSHIP
ANYTHING
AIN'T IN FRONT

YOU THERE
DIRECT
AS

the moral
of the
ANGLER

C.

BINGO
SKY

TANGO
COUCH

GOD KNOWS
YOU BY

THE WAY
THE NUMBERS
GO

act
any different
up dere

pi
gee

measuring
up
is like

a rooftop

HYDROGEN

YOU DON'T WANT
THE PHONE TONE IN YOUR EAR

YOU SAY YOU WANT TO HEAR
THE VOICE OF GOD
AND HE'S A BASHFUL BOTTLE-WASHER

HE SLIPS AWAY

LEAVES YOU WITH
THE PLACENTA OF FIRE
BETWEEN YOUR SNEAKERS

TAKING OUR PLACES
I t(h)ink my father 1940

Louis, he lays down
clock and ground

the good
out-
complicates
the fact that gets
exactly

relative in
prerogative
feature Hitler

Joe Never Bragged For Something To Do.
Champ Would Not Be Chump Just to Tell You the
Difference

THE HEAD THE SIGNAL THE SUN

("they'll rape your wife")

"THEY DO GOING THROUGH SOME CHEESE
JUST TO
SPIT ON YOUR HAND"

SUNBONNET BOG

appropriate for to knock out
analogue of country painters
THE MUSLIM TRADITION OF
SUCCESSION

formality without
the LINTEL

ABSENCE
THE

the
growing
thing

FRANK—

tactics
as
well
there
aren't

ground
is
made
where
woman
squat

renunciation
tit

"this is the first thing
which was to be proved"

so moving
implications

offered

Mao

coherence between

SPINOZA

the death

the rescue

ABOUT
THE PHENOMENTAL
SATURDAY
NIGHT
painter was that
CHILE
HAPPENED INSTEAD

AND
STILL
NOW
ISN'T
limited
AT NO BEYOND RATE
AT NO CHARGE

if
you
use
new
at
all

the fulcrum
for
spontaneous

union
"THIS HIDEOUS INDIA
1881"
all sides formulation
All this Adorno
I do not mean
to ascribe process

I have watched ton eyes
find my aisle
HE HAS HERME'S PILES FROM IT

AND
I
?
I have man hand she jammed
FROM THE UTILITY AWARENESS
(FOR

peacocks

led

me

to sharks

(glance
ME continues)
"convince" the surface

lapse favor us

street
that

can begin

(MIGHT
THAT
TAKE)
(TO CLING TO PAINTED)
(SNIPER SO IT SHOVING
THEIR RAFT)

where they fit in the
neighborhood of every day
what a winkwas sentient
as you believe
no way
to

a fire

trellised

the flow hook

above
and
during

A HILL WHAT IS

atavistic
green improbability

shallow light

the awed GRASS
GRASP HIGH IN THE
MILLENNIA
PROFUSION

IN MEMORIAM

Harley C. Shands
1916-1981

In lands I never saw, they say,
Immortal Alps look down,
Whose bonnets touch the firmament,
Whose sandals touch the town,—

Meek at whose everlasting feet
A myriad daisies play.
Which, sir, are you, and which am I,
Upon an August day?

—Emily Dickinson

Louis Douglas
1885-1982

Louis R. Douglas Sr., 97, of r108 Western Ave., died Wednesday morning at Den Mar Nursing Home, 44 South St., Rockport. He was the husband of the late Ethel G. (Johnson) Douglas.

Mr. Douglas was born in Brunette Island, Fortune Bay, Newfoundland on Oct. 31, 1885, son of the late George and Elizabeth (Bonell) Douglas.

Mr. Douglas was a salesman for Swift & Co., Cahill Wholesale Meats and Ray Beef Company. He had been retired for 35 years. In his younger days, he was a fisherman. He was a member of St. John's Church and the Ocean Lodge, I.O.O.F. where he received his 50-year member medal a few years ago.

Mr. Douglas is survived by two sons, Louis R. Douglas Jr. of Gloucester and the Rev. Philip Douglas, rector of Grace Church, New Bedford; three daughters, Irene Brauneis of Magnolia, Genevieve Goggin of Magnolia and Phyllis Malone of Gloucester; 15 grandchildren and several great-grandchildren.

His funeral was held at St. John's Episcopal Church, Middle Street, today at 11 a.m. The Rev. William J. Turner, rector, officiated. Paul T. Muse was the organist. Irene Zager sang "In The Garden" and "Just As I Am."

Burial was in Mt. Pleasant Cemetery, East Gloucester, where the Rev. Turner said prayers of committal. Pallbearers were William D. Brauneis, grandson, of Manchester, Keith Goggin, grandson, of Honeoye Falls, N.Y., Paul Nameche, great-grandson, Marcia J. Scalli, granddaughter, Patricia I. Malone, granddaughter, and Lee G. Strong, great-granddaughter, all of Gloucester.

Arrangements were by the Pike Funeral Service Inc., 61 Middle St.

from *The Gloucester Daily Times*

Michael M. Skodnick
1908-1982

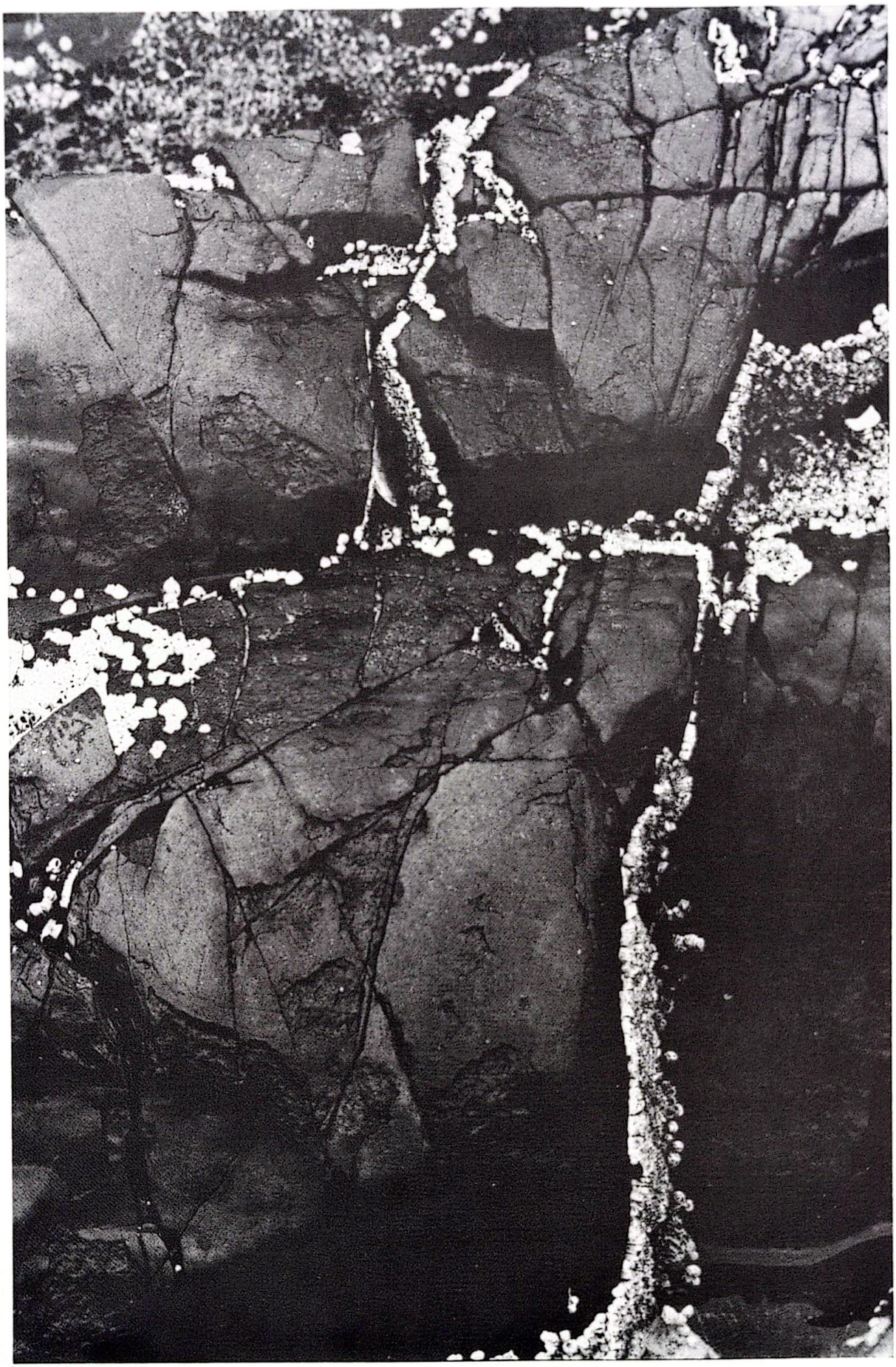
צֶדֶק לְפָנָיו יְהַלֵּךְ יָסֵּךְ אֹרַח מִישׁוֹר צֶדֶק בַּמֶּגֶן לְפָנָיו בָּאֲשְׁמְנִים צֶדֶק לְפָנָיו יְהַלֵּךְ	Justice goes before him, clearing a level path for him, shield-bearing Justice before him in the darkness, Justice goes before him.
אֵל אַדִּיר אֲבָרוֹת מִצֵּל כַּנְפֵי עוֹלָם הָעוֹשֶׂה מִשְׁפָּט בִּתְהוֹמָיו בָּרֵךְ אֶת הַבָּא אֶל עַמָּיו	O El of the mighty pinions, who overshadow the ends of the earth, who administer justice in your abysses, bless the one who is going to his father's kin,
אֶת נִשְׁמַת עַבְדְּךָ שְׁהָלַךְ לְעוֹלָמוֹ –	bless the soul of your servant who has gone to his rest.

—YONATAN RATOSH

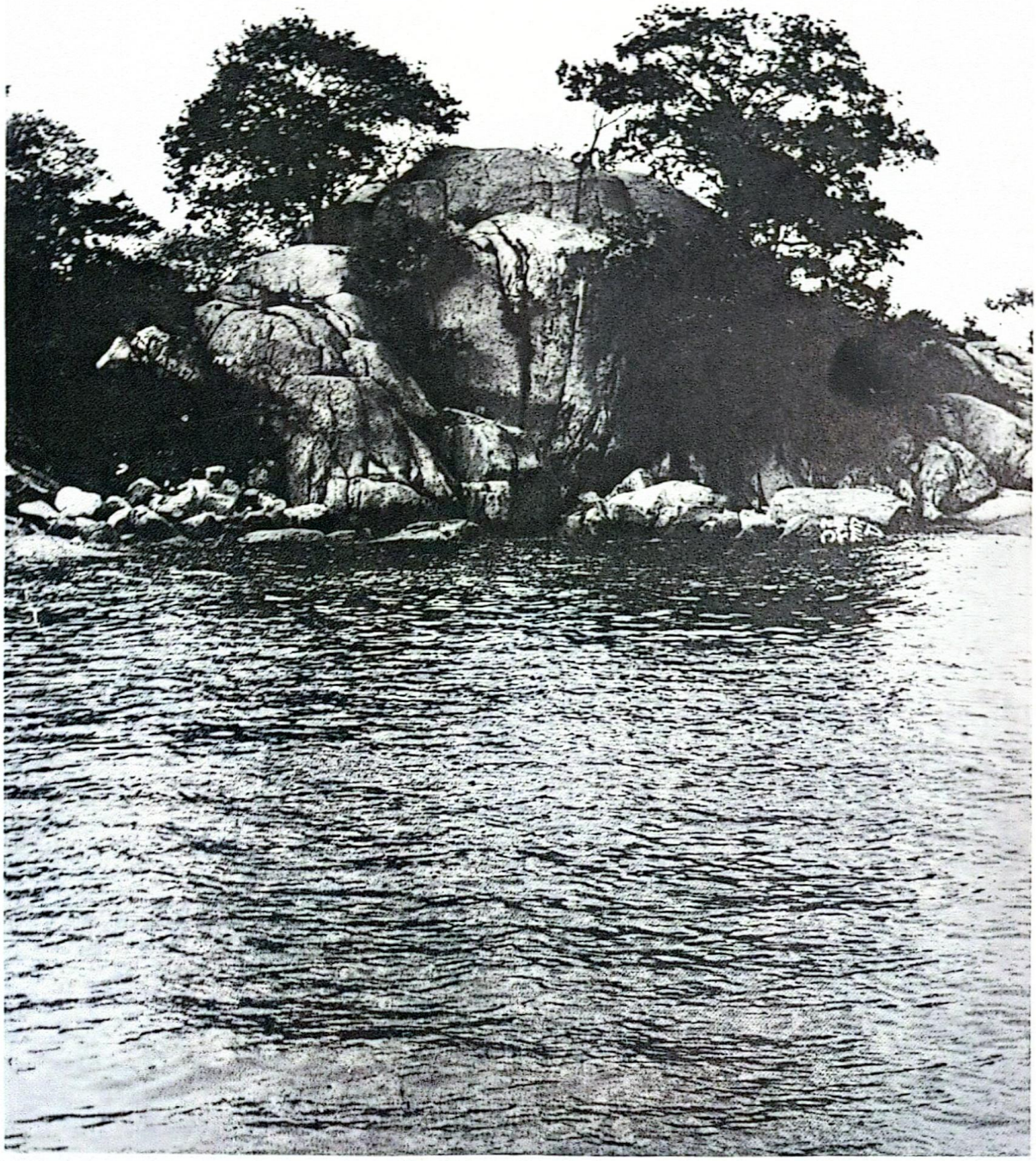
In fact there's one man I see taking a bus back over the Cut that I consider the man who made me a poet simply because of the nature of his language when I listened behind a stone wall to him and his brother from Newfoundland talk when I was four years old.

And I know men for whom everything matters. Still! Who see, feel, and know that everything that they run into does matter. Hah! and then they retain it! And then they have it! And then they have it forever! And when they're buried they're bigger than those people who don't. Even if they look the same and fit the same box.

—Charles Olson

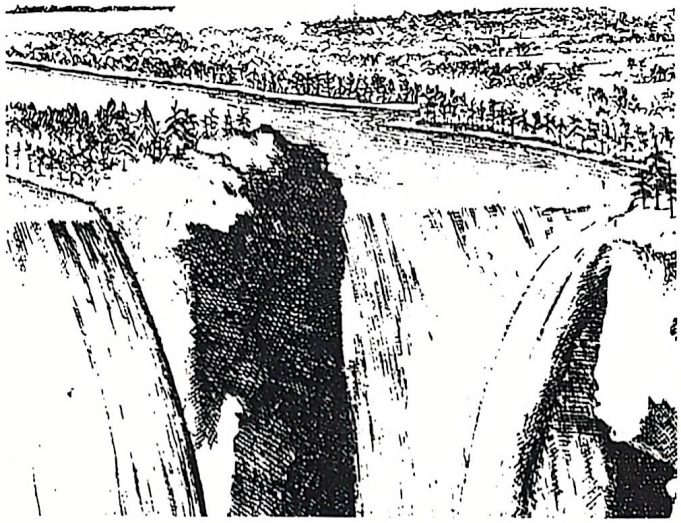


Diorite stone (photograph by Bethany Jacobson).



Stage Fort Park, Gloucester, Alina del Pino.

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To Kenneth S. Grossman, and to Rose Ginzburg a special note of thanks. "Thou drewest near in the day."

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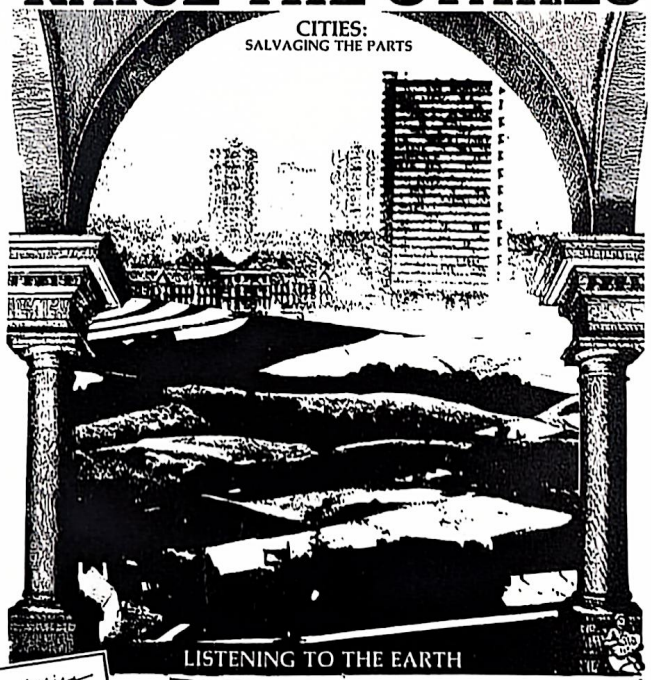
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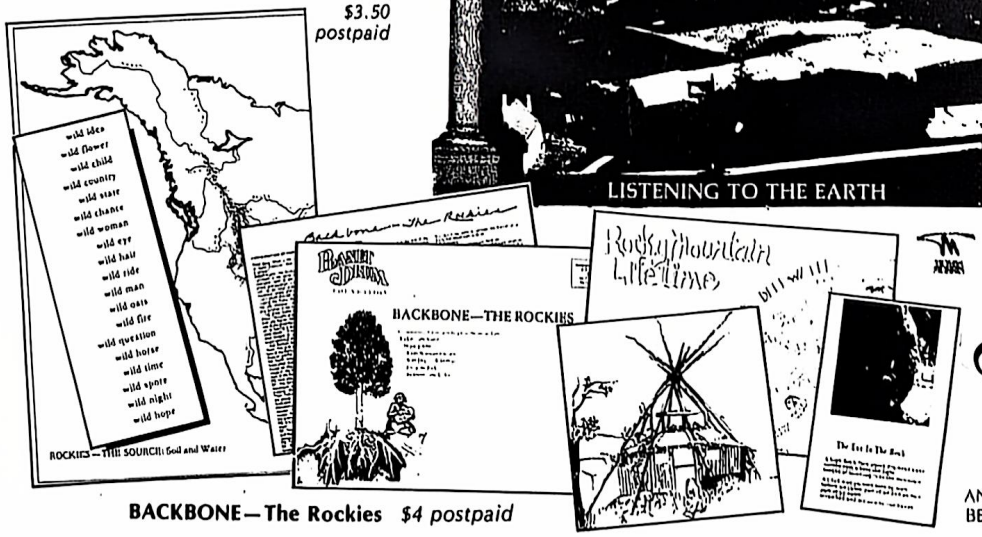
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